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THE COMPLETE LIFE-HISTORY OF THE ORGANISM OF SYPHILIS.*

By J. E. R. McDONAGH, F.R.C.S.

THE sporozoite when examined *in vivo* remains for some time unstained, but later stains very deeply without its motility becoming thereby impaired. It is seen in two forms—(a) circular, (b) renal shape—its size is about $1\frac{1}{2}$ microns in diameter, and it is actively motile; occasionally I have seen distinct flagellæ attached to it. Besides being found in the scrapings from syphilitic lesions, it can be found in the blood withdrawn from the healthy skin surrounding a chancre, and also in the general blood-stream during the stage of general infection. I have found it in the former when I was unable to find the *Spirochæta pallida* in the scraping from the sore; therefore the sporozoite is of great diagnostic importance. The sporozoite then becomes intra-cellular. On two occasions I have seen it in a small mononuclear leucocyte: it remained actively motile while within and ultimately left the cell. The cell it makes its host is a connective-tissue cell, and when inside it undergoes important changes, which can best be described under two headings:

(1) The sporozoite steadily increases in size, and by a process of budding gives rise to several bodies, which later become differentiated into male and female elements. By this time the cell is a sac, as all the reserve material has been used up by the merozoites, but the nucleus still remains, although degenerated, and then it finally disappears when the sac gives way and frees the male and female merozoites. Not all the bodies formed in this way are sexually differentiated; there are others which become free with the sexual

* A paper read at a meeting of the Pathological Section of the Royal Society of Medicine.

merozoites, and are able to start the cycle again by seeking a fresh connective-tissue cell.

(2) The sporozoite increases in size, but not to the dimensions met with in the previous case. Having reached a certain size, it divides into two, and again into four; after the primary division the karyosome disappears. These four masses, by a process of further subdivision, form a ring and migrate to the periphery of the body, then a picture is given, as if the ring had stones mounted in it the whole way round. By this time the host-cell is almost completely degenerated, and one might imagine that the parasite had become extra-cellular, while it only does so when the host-cell is no more. In the centre and around the ring other deeply stained bodies appear, until a picture of a perfect spore cyst is given. This is doubtless the true asexual stage, and the two stages just described represent the schizogony.

The sexual generations develop as follows: The male, which is a circular or sometimes oval-shaped body, is actively motile and occasionally flagellated. In the course of its progression it approaches a large mononuclear lymphocyte and enters it; it appears to become motionless the moment the cell is reached. Inside the large mononuclear it increases in size and soon loses its karyosome, and then later three pear-shaped bodies are discernible. The merozoite, as I think it may be called, or the male gametocyte, steadily develops until a coil is formed. In some of the coils deeply stained structures are to be seen, these probably correspond to the pear-shaped bodies above mentioned, and it is also probable that the bodies seen with spirochaetae coming off like the spokes of a wheel from its axle are still further developments of the same structures.

In many specimens stained *in vivo* streptococcus-like chains are numerous, and also many free coccus-like bodies, which come from the former. On careful examination each coccus-like body is found to consist of a clear ring which contains in its interior two deeply staining rods one above the other, so that the impression of a diplococcus is given. These coccus-like bodies are motile, and their form is clearly visible when examined with the dark-ground illumination. I cannot be certain whether each rod parts company or becomes one, but nevertheless they increase in length, and finally develop into spirochaetae. Moolgavkar and I have also demonstrated this development in a culture from a chancre grown in pure ascites

fluid anaerobically, and we found that it took more than a fortnight for even the undeveloped spirochaetae to evolve. These coccus-like chains and bodies presumably develop from the coils. Another body which leaves the connective-tissue cell is oval or circular, motile, and occasionally appears to be flagellated, but instead of staining homo-

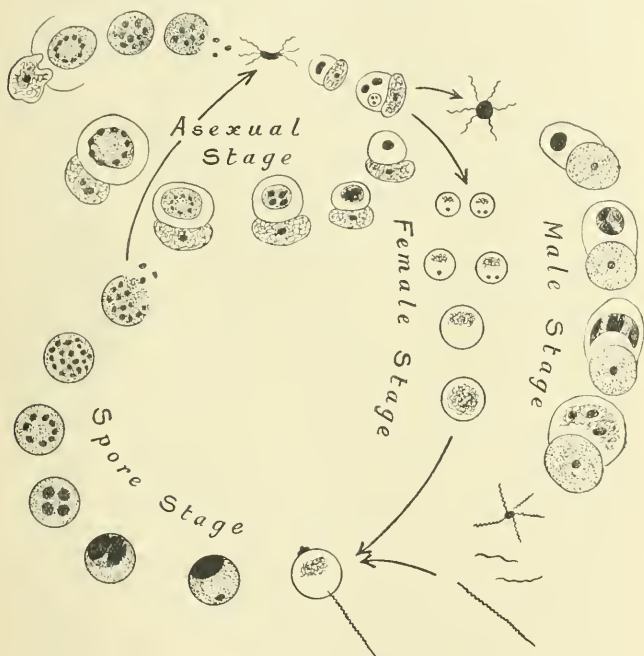


FIG. 1.—Schematic representation of life-cycle of the *Leucocytozoon syphilis*.

geneously, is a clear body containing a faintly stained chromatin network at its upper pole, and one or two deeply stained rods or dots at its lower pole. The future life of this body is extra-cellular, and it is doubtless the female gametocyte. The gametocyte increases in size until it equals a red blood-corpuscle. In my Giemsa-stained specimens the chromatin network has stained homogeneously, which

gives it that crescentic appearance which I described and figured in my last communication. The deeply staining small dot, or dots, as there may be two, at the lower pole of the cell, which are actively motile, are probably the blepharoblasts, which later leave the cell, as in a number of cells no such body is seen. The chromatin network increases in size until it practically fills the centre of the cell, hence the homogeneous staining of the whole cell as seen in Giemsa preparations. Such a cell is probably the female gamete and ready for fertilisation.

The act of fertilisation I have been fortunate enough to witness, and it occurred after this style: The female cell to the left of the upper pole had attached to it a deeply stained body shaped like a cottage loaf; to the right of the lower pole a *Spirochæta pallida* had entered, and close beside lay two more spirochætæ. The whole was in active motion. The two spirochætæ soon disappeared. The cottage-loaf body became more and more extra-cellular, until it was ultimately free. The cottage-loaf body must be the extruded polar body or bodies. The chromatin network became more deeply stained and migrated towards the upper pole, while the spirochæta which had entered became a deeply stained, more or less rod-shaped body at the lower pole. The chromatin network was now entirely at the upper pole, and one half of it had become a homogeneous darkly stained mass and the whole cell took on a rose-pink stain. During the performance the cell suddenly came to a standstill. Examined a little more carefully, I could make out that the male element appeared to divide into two, and became connected with the female by delicate deeply stained strands. These strands then appeared to contract, and so pull up the male element into the female. In the next stage no male element was visible at all, but in the female were two very deeply stained dots which no doubt represented the former. The whole of the chromatin network finally becomes transformed into a deeply staining mass, one part of which remains attached to the circumference of the cell: such a cell is no doubt the zygote. The fertilised females or zygotes can be distinguished from the gametocytes by the fact that in the former the background of the cell is stained, while in the latter it remains clear. Females can possibly multiply by division—parthenogenesis—as I have seen larger oval-shaped bodies with an elongated chromatic network on either side, the networks being quite distinct

from each other; division then takes place and two female gametocytes are formed. In these bodies no blepharoblasts are to be seen. It is quite probable that the phenomenon so witnessed was mitosis in a plasma-cell, as some of the plasma-cells *in vivo* resemble female bodies very closely. The changes of the zygote up to the formation of the spore cyst do not differ in any way from my previous description, and are well portrayed in the illustrations. Occasionally tiny little spore cysts about 4 microns in diameter are to be seen, which I cannot help thinking develop from escaped sporoblasts from the oökinet.

Frequency of the different bodies.—In early active syphilitic lesions the sporozoites are seen to best advantage, and in almost every specimen a coil and spore cyst are to be found. In some of the glands which I have examined I have found practically nothing else but coils, there being sometimes as many as five or more in a field. In most specimens the female gametocytes and zygotes are to be found in greatest abundance; it seems that neither salvarsan nor mercury has any influence upon them, as Price and I have found them in every lymphatic gland we have examined from patients who have had from one to ten injections of salvarsan. They are equally common in cases which have no symptoms as in those that have, and no relationship can be found to exist between their presence and the result of the Wassermann's reaction.

Traps.—The examination of lymphatic glands is accompanied by innumerable possible pitfalls to which I would like to draw your special attention: (1) Some dark-staining motile dots are frequently to be seen, but they are smaller than the sporozoites. (2) Circular bodies in all sizes from 1 to 7 microns are invariably to be found in every inflamed gland: they resemble superficially the female gametocytes, but can be distinguished by the fact that they contain no chromatin network, and the darkly staining masses of which they are made up are mostly situated in the circumference of the cell itself, so that one or more of these darkly stained masses are crescentic in shape. From Fig. 2 you will notice that there is a close resemblance between the mature lymphocytes and the small circular bodies with the crescentic masses, since in both instances the most deeply stained part of the lymphocyte and tiny body is the periphery, which in the former may be stained in its entirety, or more generally irregularly, with a preference for one pole where deep-staining masses

are to be found, which ultimately become extra-cellular. I think it is highly probable that the small bodies referred to are immature lymphocytes. (3) Endothelial cells which contain circular masses of varying sizes in their protoplasm; the cell ultimately bursts and these masses escape. It is in Giemsa-stained specimens and in sections

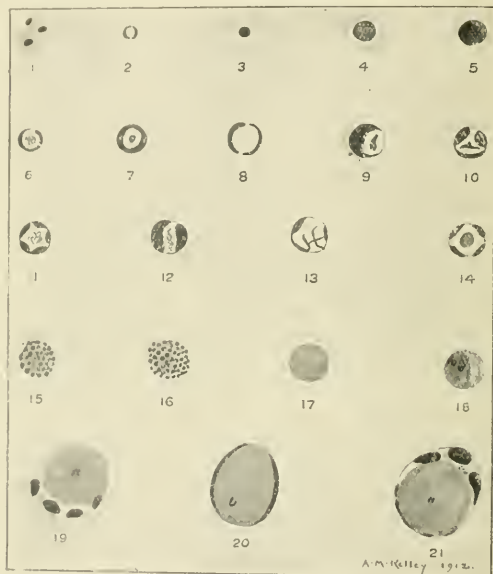


FIG. 2.—Bodies seen "*in vivo*" stained with borax methylene-blue in both normal and inflamed glands. 1-14 are developing lymphocytes. 15 and 16 are developing granular leucocytes. 17 and 18 are red blood-corpuscles. (Note chromatic filaments in 18.) 19-21 are normal mononuclears.

that these masses are most likely to be mistaken for the connective tissue syphilitic bodies. In the case of the former no bodies should be taken for parasitic unless they have a background, which in my specimens closely resembles the colour of a red blood-corpuscle. In sections the distinction is more apparent. The endothelial masses stain a dazzling transparent red (pyronin) and look as if they had no

depth in them; the centre is usually clear, or it would be better to say that the most deeply stained part of the mass is the periphery; furthermore, some of the masses stain green (methyl green), which is some evidence of their not being parasitic.* Far and away the most distinguishing feature is the fact that the syphilitic bodies are massed together in one clear encapsuled space, while the endothelial masses are scattered about anywhere in the cell. The syphilitic bodies, which are shown in Fig. 3,† have a rose-pink to red back-

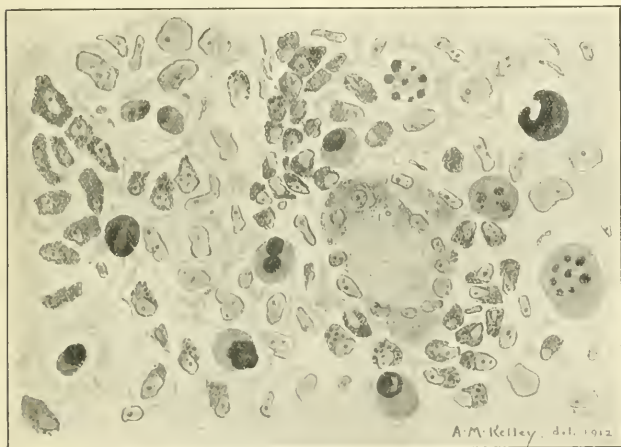


FIG. 3.—Section of syphilitic lymphatic gland.

ground, with their nuclear structure situated more or less at one pole appearing eccentrically placed and very deeply stained; sometimes to a very dark red, or even brown; and finally most of the syphilitic bodies have a clear space or halo surrounding them. The similarity in specimens stained *in vivo* between the extra-cellular parasitic bodies and the plasma-cells and those red blood-corpuscles which contain some chromatin filaments should complete the enumeration of the difficulties.

* Some of the spores in the asexual spore cyst stain green.

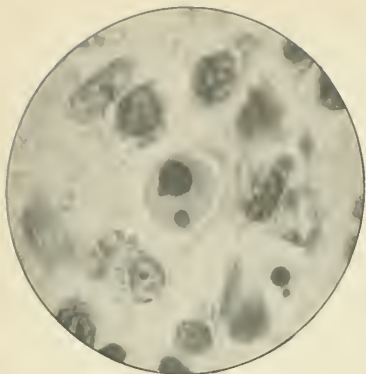
† In the original this plate is coloured.

The microorganisms described above are found in every culture prepared in a medium in which glands; therefore, those who wish to know the history of the organism should first examine normal

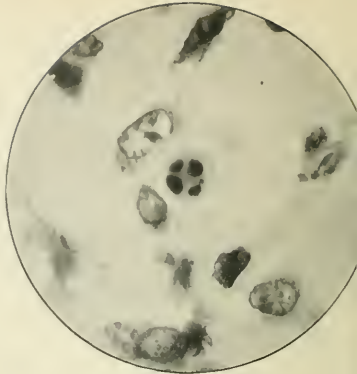


FIG. 1.—*Life cycle of the organism of syphilis*. 1. Sporozoite. 2. Sporozoite in small mononuclear. 3. Male gametocyte in large mononuclear. 4. Further development of male gametocyte into the three pear-shaped bodies. 5-7. Female gametocytes. 8. Female gamete. 9-11. Parthenogenesis or mitosis of a plasma-cell. 12-17. Fertilisation and zygote formation. 16a and 17a. Young female gametocytes.

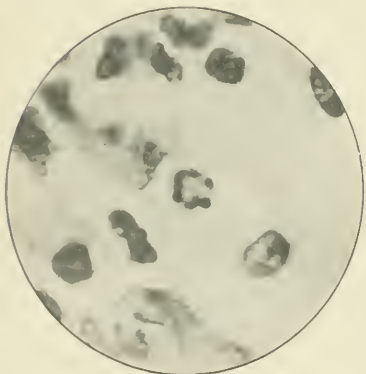
glands and glands enlarged from diseases other than syphilis. The method I have used for staining *in vivo*—viz. with borax methylene-blue—is carried out as follows: A film of Grübler's borax methylene-



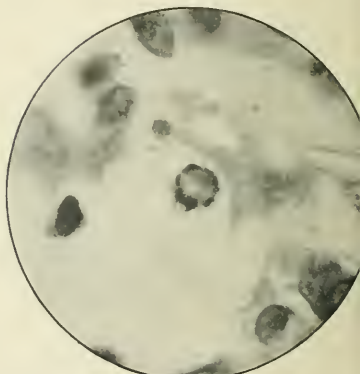
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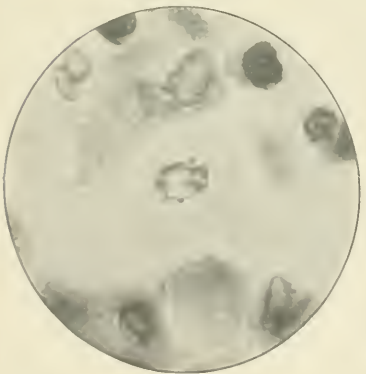
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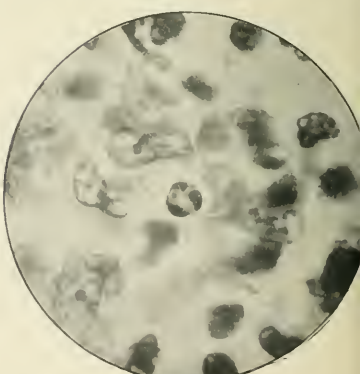
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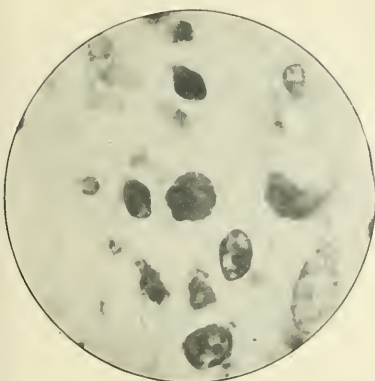
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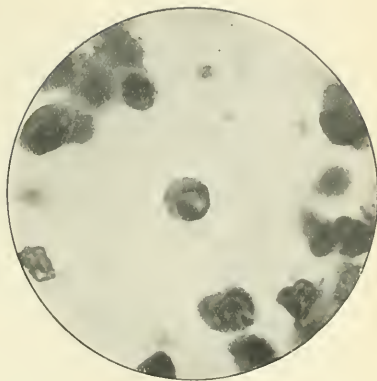
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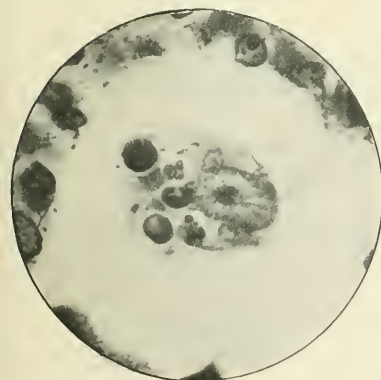
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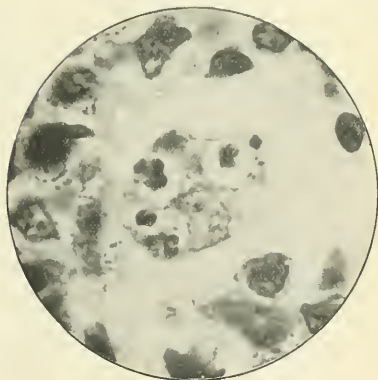
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FIG. 5.—Photographs of bodies seen in sections. 1. Development of trophozoite into merozoites by budding; in a connective-tissue cell. 2. First subdivision of trophozoite in development of asexual spore-cyst; in a connective-tissue cell. 3 and 4. Further developments of (2). 5. Asexual spore-cyst, giving off daughter spore-cysts. 6. Male gametocyte with three pear-shaped bodies and karyosome; mononuclear is not in focus. 7. Zygote. 8. Zygote dividing. 9 and 10. Protoplasmic masses in endothelial cells which might be mistaken for merozoites in a connective-tissue cell.

blue should be made and allowed to dry on a fat-free slide; the scraping to be examined should be placed upon a coverslip, which should be inverted and pressed down on to the slide, so that no air remains in between; the coverslip can then be ringed round with wax.

Quite contrary to what might be expected, practically the whole life-history of the syphilitic parasite can be followed out in one

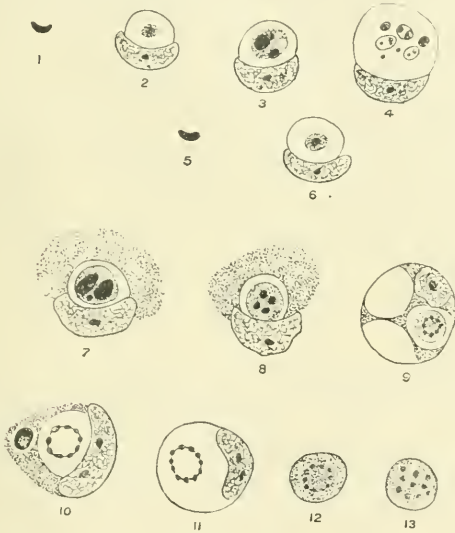


FIG. 6.—Schizogony as seen in sections. 1-4. Sporozoite in connective-tissue cell becoming sexual merozoites. 5-13. Sporozoite in connective-tissue cell becoming asexual spore-cyst.

section from a lymphatic gland which drains the primary sore, if it is removed during the stage of general infection and stained with pyronin and methyl green; even the spirochaetal coil is discernible. Lately I have tried staining films with Giemsa after they have been fixed while wet in a hot and then a cold alcoholic solution of corrosive sublimate, and further treating the section before staining with Lugol's solution and sodium thiosulphate. This method is no doubt

an improvement over the old, but it is laborious, and from a practical point of view cannot come up to the *in vivo* method of staining with borax methylene-blue. It must be remembered that quite a different impression is given of these bodies according to how they are stained. From the above description of the life-history of the organism of syphilis, I think I am justified in assigning it to the Order Sporozoa and to the sub-class Telosporidia, since the spores are formed at the end of a cycle. The order is doubtless the Coccidiidea, and the species which most befits it is the *Leucocytozoon*; hence a good name for the syphilitic parasite would be *Leucocytozoon syphilis*.

In conclusion, I would like to mention that I have found bodies stained *in vivo* in the lymphatic glands of rats which have died from an infection caused by *Trypanosoma Rhodesiense* which are indistinguishable from the syphilitic macrogametocytes and zygotes, and I have also seen the impregnation of the former by the microgamete, and the details of fertilisation fit in exactly with those described as occurring in syphilis.

FURTHER RESEARCHES ON TRYCHOMICOSIS FLAVA RUBRA ET NIGRA OF THE AXILLARY REGIONS.*

By DR. ALDO CASTELLANI,

Director Government Clinic for Tropical Diseases, Colombo, Ceylon.

IN a note published last year in the *British Journal of Dermatology* I called attention to a nodular affection of the hair of the axillary regions, observed in natives and Europeans living in Ceylon, resembling *Try. palmellina* of Pick. Since then I have seen numerous other cases, and am now in a position to give a short general account of the condition, its ætiology and treatment.

Ætiology.—My further researches have confirmed the conclusion I came to in my previous paper. The yellow variety is due to a very thin bacillary-like fungus for which I have proposed the name *Discomyces tenuis*. The black and red varieties are due to a symbiosis

* Papers read at a meeting of the Royal Society of Medicine, Dermatological Section, November 21st, 1912.

of this fungus with chromogenic cocci, a coccus producing black pigment (*Micr. nigrescens*) in the black variety, a coccus producing red pigment in the red type.

Discomyces tenuis Cast., 1912.—The microscopic examination of the nodules reveals the presence of enormous numbers of bacillary-like bodies, which are Gram-positive,* but not acid-fast. They vary in length 4 to 10 micron and more; they are rather thin, one to one and a half micron; they may be straight or variously bent, occasionally branching; they are fairly closely packed together, and are imbedded in an amorphous cementing substance. I have not succeeded in cultivating the fungus.

Characters of the coccus-like organism found in the black variety.—It is a Gram-positive, rather large, non-motile coccus, which in certain media may take the appearance of a cocco-bacillus. Sugar media are much more suitable for the growth of the organism than the ordinary agar.

Sabouraud agar.—Colonies appear twenty-four to forty-eight hours after inoculation. They are roundish, at first white, but after a couple of days the centre of each colony turns black, and this pigmentation slowly spreads eccentrically. After a time the colonies coalesce into a jet-black mass.

Glucose.—Growth similar to Sabouraud but slightly less abundant; the black pigmentation develops from the centre of the colonies and slowly spreads towards the periphery.

Ordinary laboratory agar.—Growth much less abundant than on most sugar agars, and black pigmentation less marked.

Levulose agar.—Identical to glucose.

Saccharine agar.—The pigmentation is less pronounced, and does not spread to the whole of the growth.

Raffinose agar.—Same as saccharine.

Lactose agar.—Scanty pigmentation.

Alkaline maltose agar.—Black pigmentation well marked, though in many cases it does not extend to the whole of the growth.

Acid maltose agar.—Growth less abundant than on acid maltose; black pigmentation well marked.

* If the nodules are kept in alcohol or formalin for several months the fungus apparently loses partially or totally its property of being stainable by Gram's method.

Mannite agar.—As alkaline maltose.

Inuline agar.—As alkaline maltose, but pigmentation less pronounced.

Saccharose.—As inuline.

Glycerine agar.—Abundant growth, the whole of which after a time becomes of jet-black colour.



FIG. 1.—*Trichomyces flava*.

Galactose.—As inuline.

Adonite.—Like acid maltose.

Serum.—Growth fairly abundant, but there is only a trace of pigmentation. The medium is not liquefied.

Gelatine.—No liquefaction; the growth on the surface shows after



FIG. 2.—*Trichomyces nigra*.

a time some dark pigmentation, but the colonies along the stab are white.

Milk.—No change.

Broth.—General turbidity; a thin pellicle is often present. The microscopical examination shows cocci arranged in pairs or irregularly; they are not capsulated.

Taplow water.—Some growth at the bottom, while the rest of the tube is clear.

Sugar broths.—No formation of acid or gas.

Indol.—Most strains produce a trace of indol.

Characters of the coccus-like organism found in the red variety of the affection.—The coccus found in the red variety is more difficult to isolate and grow than the coccus observed in the black type of the affection; as a rule it grows better and shows more pigment on ordinary agar than on sugar media. It is non-motile Gram-positive.

Agar.—The growth is at first white, then a red or red-yellowish spot appears in the centre. The pigmentation very slowly progresses towards the periphery, but, in my experience, never spreads to the whole of the growth; hence I was inclined for a long time to believe that I was growing two different cocci; repeated plating, however, has convinced me that this is not the case. On maltose and glucose agar the same pigmentation is present, but on most of the other sugar media no pigment is produced. Gelatine and serum are not liquefied. This coccus, as already stated, is Gram-positive and non-motile.

The coccus is closely allied culturally to *M. ruber* of Trommsdorff, found in cases of chromidrosis, and also to *Mic. rubicus* of Hefferan. In none of my cases, however, was the condition associated with chromidrosis.

Symptomatology.—The affected hairs of the maxilla present nodular formations, plainly visible to the naked eye, of rather soft consistency; they are easily removed by scraping with a triangular needle or any similar instrument. The formations are either yellow or black, or less frequently red; they may be very abundant, and form a yellow, or black or red sheath round the hair. The same patient may have two varieties; the hairs of one arm may show the yellow variety, while the hair of the other armpit may present the black type; sometimes the same individual hair may present some of the nodules yellow and others black, or, rarely, red. I have not yet observed all the three varieties present at the same time on the same patient.

The microscopical examination with a low power shows that the affected hair is covered at several places by roundish formations, partially or totally encircling the shaft. Using a higher power, these formations will be seen to consist, in the yellow variety, of enormous numbers of bacillary-like bodies embedded into an amorphous cementing substance; in the red and black varieties, in addition to

these masses of bacillary bodies and mycelial segments of the discomycetes, large groups of cocci-like bodies are observed. In my cases the affection was never associated with chromidrosis.

Diagnosis.—The condition must be differentiated from other nodular parasitic conditions of the hair. As well known, the principal nodular affections of the hair of parasitic origin are :

- (1) *Trichosporosis tropica* or *pie dra*.
- (2) *Unna's trichosporosis* or *pie dra nostras*.
- (3) *Behrend's trichosporosis* or "*nodular trichomycosis*."
- (4) *Beigel's trichosporosis* or *Tinea nodosa*.
- (5) *Du Bois' trichosporosis*.
- (6) *Leptothrix* or *Pick's Trichomycosis palmellina* or *Trichomycosis nodosa* of temperate zones.

(1) *Trichosporosis tropica* or *pie dra*, investigated by Morris Osario, Magalhaes and recently by MacLeod, generally affects the hair of the head; the nodules are extremely hard, hence the name "*pie dra*." The fungus found belongs to the genus *Trichosporon*—*Tr. giganteum*, Behrend, 1890. There are probably several varieties of *pie dra*, due to different varieties of *trichosporon*; one such has been recently described by Horta in Brazil.

(2) *Unna's trichosporosis* or *Piedra nostras* has been described by Unna in the hair of the moustache and beard. It is due to *Trichosporon orale* (Unna, 1896).

(3) *Behrend's trichosporosis* or "*nodular trichomycosis*" described by Behrend, affecting the hair of the beard. It is due to *Tr. ovoides* (Behrend, 1890).

(4) "*Beigel's trichosporosis*" or "*Tinea nodosa*" discovered in London by Cheadle and Morris, and later in Breslau, Nancy, etc. It attacks the hairs of the head and is due to *Trichosporon Beigeli* (Rabenhorst, 1867).

(5) *Du Bois' trichosporosis* of the hairs of the pubic region due to *T. glycophilus* (Du Bois, 1910).

(6) *Leptothrix* (E. Wilson), or *Trichomycosis nodosa* (Patterson), or *Trichomycosis palmellina* (Pick). In this condition, as described by Paxton, Wilson, Pick, and later by Payne, Patterson, Crocker, Pusey, etc., the hairs present irregular lobed masses of hard consistency in which are often imbedded some of the fibres of the cortex; according to Crocker the fibres of the whole shaft may be split up

and the hair may break off with a brush-like termination. The researches on the ætiology of this condition seem to have given widely different results: Payne and Patterson described a short bacillus which penetrates under the cortical scales. Eisner describes a diplococcus, his results being confirmed by Sonnenberg; Colombini has found cocci; Babes, Pick, Balzer and Barthemly having found the condition often associated with red sweat consider the bacillus found to be the *B. prodigiosus*.

With which of the above conditions can the nodular affection I have observed in Ceylon be identified? It certainly has nothing to do with piedra or with any other form of trichosporosis, as in my cases no trichosporon is found. The fungus being a discomyces with very thin, bacillary-like mycelium, it most closely resembles, as I stated in my first paper, the leptothrix, or *Tr. palmellina*, of which I consider it to be only a variety. It differs from the typical leptothrix of temperate zones by the nodules being soft, easily removed, and by the hairs not becoming brittle. Moreover, it is easily cured.

Course, prognosis, and treatment.—The course is chronic, but the condition may subside or disappear on the patient going to a cold climate.

The affection, if of very little pathological importance, has a certain practical interest, being much objected to by patients, especially by ladies.

The treatment is not difficult; a very efficacious one consists in dabbing the hair two or three times daily with a solution of formalin in spirit (5j to 3vj), and applying at night a sulphur ointment (2-5 per cent.).

Dr. ALDO CASTELLANI read a *note on Copra Itch*.

FOR several years past I have noticed, in Ceylon, in people working in copra mills a peculiar eruption, which, for convenience sake, I called "copra itch." Copra, as well known, is derived from cocoanuts. The first impression on seeing a patient suffering from the condition is that he is suffering from scabies, except that no burrows or cunicula are present.

The hands, arms, legs, and sometimes the whole body except the face present fairly numerous, extremely pruriginous papules often covered by small bloody crusts due to scratching; papulo-pustules

and pustules are generally also present. The eruption begins as a rule on the hands, and from there spreads to the arms, legs, and trunk; it never affects the face. The eruption has very little tendency to heal spontaneously, at least while the patient continues working in infected mills and handling copra.

Ætiology.—In a patient suffering from the eruption who came to see me one day immediately on leaving the mills I noticed on one of his arms two tiny white specks moving about. I picked them out and examined them microscopically, when I saw they were acari-like parasites. On questioning the patient he told me he had often observed small, whitish bodies moving about in copra dust. I asked him to bring me some copra dust, and he very kindly did so. The copra dust was swarming with white minute bodies, which on microscopic examination appeared to be identical to the two I had found on his body.

Since then I have examined many other samples of copra containing the same mite. According to the zoologist to whom I have given specimens it is not a sarcoptes. Dr. Stanley Hirst describes it as a new variety of *Tyroglyphus longior*—*Tyroglyphus longior* Gerv., var. *castellani* Hirst. The mite of copra itch does not appear to bury itself in the skin; it apparently induces the dermatitis in the same manner as *Pediculoides ventricosus* (Newport), which live in diseased cereals, produces an eruption in persons handling such cereals; but further investigation is necessary to settle this point.

Experimental reproduction of the disease.—I have made repeated experiments in persons who have volunteered. By rubbing in copra dust containing sarcoptes, itching frequently begins very shortly after, and twenty-four to forty-eight hours later an extremely pruriginous papuloid eruption often develops. The same result is obtained by picking out of copra dust the sarcoptes and placing them (alone without any dust) on the skin under a covering, such as a piece of lint kept in place by a bandage. A few individuals seem to be unaffected by the presence of the sarcoptes or the copra dust containing it.

Diagnosis.—As already stated, the eruption on superficial examination may be mistaken for scabies; true burrows, however, are always absent, and the two parasites are totally different.

Course and progress.—The eruption has very little or no tendency to heal spontaneously while the patient goes on working with the

infected copra. If the patient abstains from his work for some time the condition disappears spontaneously.

Treatment.—Beta-naphthol ointment (5–10 per cent.) is, in my experience, very useful. The mode of action of the naphthol in these cases is not quite clear: its beneficial effects cannot be solely due to its parasiticide properties, because the copra acari remain for only a short time on the body, and in most cases, when the ointment is applied at night, the parasites are no longer on the skin of the patient. It may act as an antipruritic antiseptic agent in this way, diminishing scratching and secondary pyogenic infections; it is probable, also, that a little ointment may remain on the skin after the morning bath, and be repellant to the copra mite, and in this way prevent reinfection.

Mr. STANLEY HIRST read a report on the mite causing the Copra Itch (published by permission of the Trustees of the British Museum).

Dr. Aldo Castellani has kindly allowed me to examine his specimens of the mite which is the cause of copra itch in Ceylon. This acarus belongs to the genus *Tyroglyphus*, and resembles *T. longior* Gerv. exceedingly closely in structure. I think it is a new variety of *T. longior*, and I propose the name *castellani* for this variety. A comparison between this new variety and the typical form of the species is given below.

The mites of the family Tyroglyphidæ chiefly feed on dried vegetable and animal substances, and are often present in great numbers in cheese, cereals and other products. A number of instances of these Tyroglyphid mites attacking human beings are known, and several species have been recorded as causing eruptions or other affections of the skin of the persons attacked (a list of these species is given in Prof. Gedoelst's *Synopsis de Parasitologie*, 1911, pp. 172–175). Sometimes the resulting effect is not very serious, and is only of a transient nature—for instance, in the case of grocers' itch, which is apparently caused by *Glycyphagus domesticus*, Geer. The water itch of Indian coolies on the tea plantations, which is also caused by an acarus of this family (*Rhizoglyphus parasiticus*, Dalgetty), seems, however, to be a serious complaint.

Tyroglyphus longior Gerv., var. *castellani*, var. nov.

This new variety differs from the typical form in the following respect: The male of the typical form of the species has a pair of rather short hairs on the ventral surface of its body, some distance behind the anal suckers, and these two hairs are very much shorter than any of the other hairs at the hinder end of the body. In the male of the variety *castellani*, there is no pair of short hairs in this

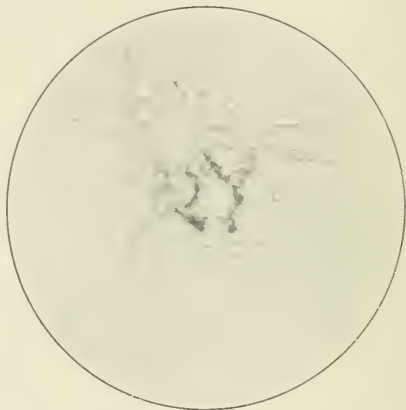


FIG. 3.—*Tyroglyphus longior*, Gerv., var. *castellani* (Hirst).

position, even the shortest of the hairs of the seven pairs at the posterior end of the body being comparatively long.

The following details of structure may also be useful: The hairs of the body appear smooth, unless carefully examined under a rather high power of the microscope, and then they are seen to be very slightly feathered. There is the same number of hairs on the cephalothoracic part of the body as in the typical form of *T. longior* and they are similar in appearance, the hairs of the inner pair (of the two hinder pairs) being considerably longer than those of the outer pair. With the exception of the difference described above, the hairs on the abdominal part of the body are also similar to those of the typical form. The hairs on the dorsal surface of the male are not shown

correctly in Michael's figure of this species.) Tarsi of legs apparently of much the same length as in the typical *T. longior*; the usual two little projections are present on the upper surface of the fourth tarsus of the male.

Length of male, '3 mm. ; of female, '4 mm.

Note.—I have carefully compared Dr. Castellani's specimens with freshly procured examples of *T. longior* found living in Gorgonzola cheese purchased in London. The feathering of the hairs was easily seen in specimens examined alive, under the microscope. According to Michael, *T. longior* has a very wide distribution in Europe and is found on most sorts of dried or preserved animal and vegetable matter. He says that it is found in almost all houses upon dried provisions, often swarming in enormous numbers. Many other details of its habits are given in Michael's account of this species (see *British Tyroglyphida*, vol. ii, pp. 123-131).

Dr. ALDO CASTELLANI also read a *note on the ætiology of some tropical dermatomycoses* (*Tinea cruris*, *Tinea flava et nigra*, *Tinea imbricata*)*.

Skin-diseases due to fungi are extremely common in the tropics; the damp hot climate of most tropical countries being very favourable to the growth of vegetal parasites.

The dermatomycoses observed in the tropics may be classified in the following groups :

Tropical Dermatomycoses.

Genera.	Species.	Condition caused.
I.—Due to fungi of the genera <i>Saccharomyces</i> , <i>Cryptococcus</i> (Kitzing), <i>Zymonema</i> (Beurmann)	<i>S. gilchristi</i> (Viellemain) and other species	Blastomycosis.
II.—Due to fungi of the genus <i>Sporotrichum</i> (Link, 1809)	<i>S. beurmanni</i> (Matruchot and Ramond, 1908); <i>S.</i> <i>asteroides</i> (Splendore, 1910); <i>S. indicum</i> (Cas- tellani, 1908)	Sporotrichosis.
III.—Due to fungi of the genus <i>Pityrosporum</i> (Sabouraud, 1895)	<i>P. cantliei</i> (Castellani, 1898)	Tropical seborrhœa of children.

* Illustrations, drawings and photographs of the various dermatomycoses and their fungi will be found in the second edition of the *Manual of Tropical Medicine* (Castellani and Chalmers).

Genera.	Species.	Condition caused.
IV.—Due to fungi of the genus <i>Hemispora</i> (Viellemain, 1906)	<i>H. stellata</i> (Viellemain, 1906)	Hemisorosis.
V.—Due to fungi of the genera <i>Aspergillus</i> (Micheli, 1727) and <i>Penicillium</i> (Link, 1809)	<i>A. barbæ</i> (Castellani) <i>P. barbæ</i> (Castellani)	Aspergillois of hairy parts. Penicilliosis of hairy parts.
VI.—Due to fungi of the genera <i>Aspergillus</i> (Micheli, 1725); <i>Penicillium</i> (Link, 1809); <i>Monilia</i> (Parsoon, 1801); <i>Monoyella</i> (Castellani, 1907)	—	Pinta.
VII.—Due to fungi of the genus <i>Trichosporum</i> (Behrend, 1890)	<i>Tr. giganteum</i> (Behrend)	Piedra.
VIII.—Due to fungi of the genera <i>Discomyces</i> (Rivolta, 1870); <i>Madurella</i> (Brumpt, 1905); <i>Indiella</i> (Brumpt, 1905); <i>Aspergillus</i> (Micheli, 1725); <i>Oospora</i> ; <i>Sporotrichum</i>	—	Madura foot.
IX.—Due to fungi of the genus <i>Makassezia</i> (Baillon, 1889)	<i>M. tropica</i> (Castellani)	Tinea flava.
X.—Due to fungi of the genus <i>Microsporoides</i> (Neveu Lemaire, 1906)	<i>M. minutissimus</i> (Burchardt)	Erythrasma.
XI.—Due to fungi of the genus <i>Foxia</i> (Castellani, 1908)	<i>Foxia mansonii</i> (Castellani)	Tinea nigra.
XII.—Due to fungi of the genus <i>Epidermophyton</i> (Sabouraud, 1907) and <i>Trichophyton</i> (Malmsten, 1845)	<i>Ep. cruris</i> (Castellani); <i>Ep. perneti</i> (Castellani); <i>Ep. rubrum</i> (Castellani); <i>Tr. nodiformans</i> (Castellani)	Dhobie itch.
XIII.—Due to fungi of the genus <i>Trichophyton</i> (Malmsten, 1845)	<i>Tr. albicans</i> (Nieuwenhuis) <i>Tr. blanchardi</i> (Castellani)	Tinea albigena.
XIV.—Due to fungi of the genus <i>Endodermophyton</i> (Castellani, 1908)	<i>End. concentricum</i> (Blanchard); <i>End. indicum</i> (Castellani) <i>End. castellanii</i> (Berry)	Tinea Sabouraudi. Tinea imbricata. Tinea intersecta.

From the above table it will be seen that tropical dermatomycoses "*sensu strictu*," viz. occurring only in the tropics, are comparatively few; most of them are endemic also in temperate zones, though occurring there rarely, or at any rate, less frequently than in the tropics. I may mention *Tinea cruris*, *Madura foot*, etc.

The same remark, however, applies to every other branch of tropical medicine. Moreover, owing to the enormous increase in traffic, and intercourse between tropical countries and Europe, diseases have been imported into Europe from the tropics and *vice versa*.

The subject of dermatomycoses in the tropics being a very large

one, I propose in this paper to limit myself to some brief remarks on the ætiology of only a few of them—those in which I have been most interested during my stay in Ceylon :

- (1) *Tinea cruris*.
- (2) *Tinea flava et nigra*.
- (3) *Intertrigo blastomycetica*.
- (4) *Tinea imbricata*.

Tinea cruris (*dhobie itch*).—*Tinea cruris*, under the name of *dhobie itch*, *Burmah itch*, etc., has been known to tropical practitioners for a great many years. In 1905 I suggested that it should be separated



FIG. 1.—*Tinea cruris*.

from the ordinary forms of *Tinea corporis*, and MacLeod suggested the appropriate name of *Tinea cruris*. For the fungus most frequently found in such cases characterised by the yellowish cultures, I suggested the term *Tr. cruris*. Pernet found and described a trichophyton, which I later named *Tr. Perneti*.

In 1907 Sabouraud in a masterly manner investigated the condition in France, which he called *Tinea inguinalis*. There is no doubt that Sabouraud's "*Tinea inguinalis*" is the *dhobie itch* of tropical authors, or what MacLeod and I called *Tinea cruris*, as Dr. Sabouraud, having kindly examined my cultures, has come to the conclusion that *Ep. inguinalis* and *Ep. cruris* are the same fungus.

Though *Ep. cruris* is the fungus most frequently observed in *Tinea cruris*, it is not the only one which can give rise to the condition ;

tinea cruris may be caused by several species of fungi, each of which gives rise to a slightly different clinical variety of the disease. Up to the present time I have observed the following organisms: *Ep. cruris*, *Ep. Perneti*, *Ep. rubrum*, *Tr. nodoformans*.

Ep. cruris Cast., 1905, syn. *Tr. cruris*, 1905, *Epid. inguinalis* Sabourand, 1907, *Tr. Castellanii*, Brooke, 1908. This is, as already stated, the commonest species. The fungus is very abundant in recent cases, but is extremely scarce in cases of old standing. The mycelial tubes in fresh cases are generally straight, have often a double contour, and the segments are rectangular, their breadth being $3\frac{1}{2}\mu$ to $4\frac{1}{2}\mu$; branching is not rare. The spores are rather large (4 to 7 μ), roundish, and present a double contour; they never collect in clusters. In chronic cases degeneration forms of the fungus are met with; the mycelium may be banana-shaped, presenting several constrictions, or long strings of ovoid elements may be seen. The fungus grows well, but rather slowly, on Sabourand's agar; the growth begins to be visible after four to eight days, the colonies being at first of peculiar yellowish colour; later they may become white with pulverulent surface. Pleiomorphism develops very quickly.

Ep. Perneti Cast., 1907.—This fungus was first described by Pernet. It grows more rapidly than *Tr. cruris*, and the cultures have a delicate pinkish colour, which is generally lost in subcultures. It is very rare in Ceylon.

Ep. rubrum Cast, 1909 (syn. *Tr. purpureum* Bang, 1910).—This fungus was described by me in Ceylon in 1909, and later independently by Bang in Europe, under the name of *Tr. purpureum*. In microscopical preparations in liq. potass. from the affected parts mycelial tubes are seen, and free spores identical to what one sees in *Ep. cruris* and very similar to any trichophyton of the megalosporon type.

Cultures: Sabourand's agar.—The growth begins to appear four to six days after inoculation as a raised red spot, which gradually enlarges. The full-grown colonies are of a deep red colour, either with a central knob, or crateriform, and are partly covered by a delicate white duvet. In old colonies the white duvet is more abundant and thicker. It may hide the red pigmentation almost completely.

Glucose agar.—This is the best medium for the growth of the

fungus. The cultures are of a very deep blood-red colour, and the pigmentation may spread to portions of the medium itself. In old cultures abundant white duvet is present, and this may hide the pigmentation, but scraping out this duvet the red pigmentation will be found to be still well marked.

Ordinary agar and glycerine agar.—The fungus grows fairly well, but there is no red pigmentation.

Trich. nodiformans Cast. 1910.—On Sabouraud agar the colonies have a white powdery surface, with small central knob. The growth slowly deepens in the medium, and the submerged portion has a characteristic brick-red colour, which generally disappears after repeated transplantations.

Glucose agar.—Growth somewhat more abundant than on Sab. agar, but the peculiar brick-red pigmentation of the submerged growth is usually absent.

Glycerine agar.—Fairly abundant growth; no pigmentation.

Ordinary agar.—Scanty growth of whitish colour.

Although in this paper I do not propose to enter into any clinical details, I may say that *Ep. cruris* causes the commonest and best known type of *Tinea cruris*, as described by all tropical authors, and in Europe by Sabouraud; characterised by large festooned patches with elevated margins on the scrotum perinæum and inner surface of the thighs.

In one of my papers published in the *British Journal of Dermatology* in 1910 (p. 147), I stated that it is an error to consider *Ep. cruris* as always localised to the groin and the armpits. In many cases it spreads to other parts of the body, excepting only the scalp; indeed, the affection may first start on the chest or arms, etc., and then spread to the groins and armpits, or may not even affect these regions. Hence perhaps the term *Tinea cruris* and *Tinea inguinalis* are not altogether appropriate; the term *Tinea tropicalis* has been suggested. Sabouraud and Whitfield have made the important observation that *Ep. cruris* often produces a peculiar type of pruriginous dermatitis of the toes.

In the cases of *T. cruris* due to *Ep. rubrum* the patches present often from the very beginning an eczematoid appearance, the edge is perhaps not so elevated, but very abrupt, dotted by numerous papules often covered by minute bloody crusts due to scratchings. The

lesions are arranged in complete or incomplete rings, sometimes very large, but solid patches may also be present. This type of eruption has the greatest tendency to spread from the scroto-crural regions to other parts of the body.

Tr. nodiformans gives rise to a peculiar type of *T. cruris* with very thick elevated margins and along the edge deep-seated nodules resembling, to use a popular expression, "blind boils." It has pyogenic properties and may attack the hair-follicles. Dr. Chalmers and myself once saw a case presenting a nodular eruption due to this fungus in the groins, and at the same time presenting a patch of sycosis due to the same organism on the right cheek.

Tinea capitis.—In Ceylon, while dermatomycoses of every kind are extremely common, *Tinea capitis* is comparatively rare. All the cases I have seen were of the same type and due to the same endo-ectothrix trycophyton; the scalp presented in all cases numerous white patches covered by an enormous number of Pyter. whitish squamæ. An interesting fact is that the patches remain bald permanently. The fungus is trycophyton endothrix, practically identical to *Tr. violaceum* and therefore there is no need to give a special description of it.

Intertrigo saccharomycetica, Syn. *Intertrigo blastomycetica*.

Remarks.—Cases of this affection have been observed by me in Ceylon several years ago, and one similar has been reported by Whitfield in England. The affection is apparently rare. It generally attacks the scroto-crural and axillary regions. The affected skin is red, and there may be slight exudation. The borders of the eruption are fairly well marked, but never elevated. In most cases there is not much itching, and the affection may recover spontaneously.

Ætiology.—In scrapings a saccharomyces (*S. Samboni* Cast. 1907), which is easily cultivated on sugar media, is found.

Treatment.—The treatment consists in washing the affected parts with potassium permanganate lotion, 1 in 40,000, resorcin, 1 in 100, followed by the application of powders of boric acid tale, or salicylic gr. x, tale ʒj.

Tinea flava.—This dermatomycosis is confused by several authors with the Pityriasis versicolor of temperate zones, but the researches of Jeanselme and myself tend to prove, I think, that it is a separate entity. The disease, which is extremely common in Ceylon, is charac-

terised by the presence of bright yellow patches found in order of frequency, on the face, neck, chest, abdomen, arms, and legs; it is of very difficult cure. The fungus is a *malassezia* (*Malassezia tropica*, Cast., 1905), which, microscopically, can hardly be distinguished from *Mal. versicolor*; it is not cultivable. In fresh preparations in liq. potassium one sees mycelial threads 3-5 mm. wide with numerous



FIG. 2.—*Endodermophyton indicum*
(glucose agar).

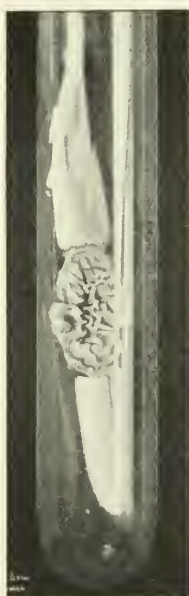


FIG. 3.—*Endodermophyton concentricum*
(glucose agar).

swellings, constrictions and other irregularities; spores roundish, 4-5 micron, with double contour, often collected in clusters.

Tinea nigra.—This dermatomycosis was first described by Manson in China in 1870, but his observations were forgotten as they were not quoted by him in his subsequent publications. It was re-described by me in Ceylon in 1905. It is characterised by the presence of

black patches due to a fungus belonging to a new genus which I called "foxia," in honour of the distinguished scientific dermatologist, Dr. Colcott Fox. The fungus *Foxia mansonii*, in fresh preparations from the affected parts, shows mycelial articles, straight or variously bent and shaped, $2\frac{1}{2}$ to $3\frac{1}{2}$ microns wide, non-ramified; spores large globular, 5-10 microns in diameter, collected in clusters.

The fungus is easily grown on maltose and glucose agar, also on ordinary agar, giving rise to greenish-black colonies, which later fuse into a jet-black mass. It slowly liquefies gelatine.

Tinea imbricata.—As I propose to give shortly a full account of this interesting malady in the *British Journal of Dermatology*, I will limit myself here to only a few remarks. As well known, the ætiology of this dermatomycosis has been, and still is, the subject of numerous controversies. Manson first, in 1872, described a trycophyton-like

organism in the squamæ; with the laboratory technique of that time attempts at cultivation did not succeed. Blanchard considered it non-cultivable and called it "*Tr. concentricum*"; on the other hand Nieuwenhuis stated that it was quite easily cultivated and was characterised by the colonies being crateriform. In recent years the general opinion has been that aspergilli-like fungi were the real cause of the disease. Tribondeau described fructifications somewhat similar to those of an aspergillus and created for the fungus the genus *Lepidophyton*. Wehmer has described it as a true aspergillus—*Aspergillus Tokelan*. From the investigations I have carried out in Ceylon, I think I am justified in stating that aspergillus and aspergillus-like fungi have nothing to do with the disease. When they are present in the squamæ they are merely saprophytes or contaminations. By using a special technique I have succeeded in growing what I consider the true fungi causing the disease; they are not trycophytons, they resemble more—according to Sabouraud, who has kindly examined my cultures—the achorions. According to all probabilities they will have to be placed in a separate genus, for which I have suggested the term "endodermophyton." I have isolated so far two species, *End. concentricum* and *End. indicum*.

End. concentricum on glucose agar (4 per cent.) shows a growth with cerebriform or crinkled surface. The growth and medium show a slight amber colour, which later may become of a much deeper hue. In recent cultures duvet is absent; after repeated transplantations, however, a little duvet appears.

End. indicum on the same medium (glucose agar 4 per cent.) shows a growth with surface somewhat convoluted or furrowed; in most cultures a portion of the growth, generally the central portion, is of a deep orange colour, or red-orange, or pink-orange; the rest of the growth appears white and powdery, being covered by a very short, delicate duvet; some cultures are of a beautiful red colour with very little or no duvet. By inoculating either of the above fungi I have been able to reproduce the disease typically in human beings. I venture, therefore, to state that the two fungi I have described are the true ætiological agents of the disease. *End. indicum* seems to give rise to a less severe type of the malady than *End. concentricum*, but further investigation is necessary on this point.

DERMATOLOGICAL SECTION.

Meeting held on Thursday, December 19th, 1912, Sir MALCOLM MORRIS, K.C.V.O., President of the Section, in the Chair.

Dr. H. G. ADAMSON showed *two cases of Dermatitis papillaris capillitii* (Kaposi), or *Acne keloid*. This affection was apparently uncommon in this country, for since Morratt Baker first showed a case in London thirty years ago not more than seven or eight examples had been recorded here or exhibited at the Section or at the old Dermatological Society. The two cases now shown were, as usual, in men, and the eruption was seated transversely across the back of the neck. One patient, aged 30 years, had had the complaint for five years; the other, aged 55 years, for twenty-five years. The latter case showed the classical keloid-like growth with tufts of hair at the margin. The former was interesting as an example of the earlier stage before the keloid appearance had developed. In this case there were raised rounded red nodules of the size of a pin's head up to that of a large pea. Many had a central hair, but there was nowhere any appearance of comedo as in ordinary acne.

Modern investigations tended to show that this complaint was probably the result of some local infection through the pilo-sebaceous follicle, but that it was neither acne nor keloid, and the exhibitor thought that the original name given by Kaposi, although cumbersome, was preferable to that of *Acne keloid*. Local friction from collars or collar-bands probably formed a factor in aetiology. Histologically the lesions showed dense infiltrations of plasma-cells between newly formed connective-tissue bundles. Sections were shown.

(The exhibitor hoped to report these two cases more fully, together with an abstract of the literature of this disease, in the *British Journal of Dermatology*.)

The PRESIDENT (Sir MALCOLM MORRIS, K.C.V.O.) expressed his surprise at Dr. Adamson's statement that so few instances of the condition had been shown in London. Certainly several had been seen at meetings of the British Medical Association. He had seen very good results follow the application of radium.

Dr. WHITFIELD said that in some of these cases comedones were found when the condition was advanced, but probably this was purely accidental. The epithelium collected, and it became a scar comedone, similar to that following a burn. By this time it might even contain the acne bacillus, but it would be quite secondary.

Dr. H. G. ADAMSON also showed a case of *sporotrichosis of the disseminated, ulcerating, gumma type*, in which there occurred acute *synovitis*. The case was of interest as being the first example of disseminated sporotrichosis which had been reported in this country, and in that the patient was a woman who had never been out of London. The history of the discovery of sporotrichosis and a summary of the recent knowledge of the disease had been recently given by de Beurmann, at the meeting of the British Medical Association this year,* and the exhibitor would therefore merely relate the main facts of his case, which was a typical one.†

E. W—, needlewoman, aged 60 years, was admitted into St. Bartholomew's Hospital on August 16th, 1912, suffering from ulcers on the arms and legs. The history given by the patient was as follows: In August, 1911, there had appeared upon the outer side of the right thigh a swelling of the size of a pigeon's egg. Two or three weeks later there was another similar swelling on the right arm. The swellings were not red or painful. A similar lump appeared upon the left shoulder. She was then admitted to a general hospital, and whilst there other lumps appeared on the back; these ulcerated and were fomented. She had "vaccines" twice a week for three months. As no improvement took place she left the hospital, and later attended at St. Bartholomew's Hospital, and was there admitted.

On admission to St. Bartholomew's Hospital there were numerous ulcerations upon both arms and both legs, and several upon the buttocks, shoulders, and back. There were also about half a dozen deeply seated soft nodular swellings (*gummata*) varying in size from that of a small marble to that of a hen's egg (Fig. 1). It was obvious that the ulcerations had resulted from the breaking down of the gummatous swellings. These ulcerations were peculiar in that they

* *Brit. Med. Journ.*, August 10th, 1912, p. 289.

† The literature of sporotrichosis is now very extensive. The most important work on the subject is *Les Sporotrichoses*, by de Beurmann and Gougerot, a volume of 850 pages (Libraire Félix Alcan, Paris, 1912), with a complete bibliography (23 pages). For a short summary see article "Sporotrichosis," Allbutt and Rolleston's *System of Medicine*, ix. The only cases hitherto reported in this country are: (1) The case of Norman Walker and Ritchie (*Brit. Med. Journ.*, 1911, vol. ii, p. 1), localised type, infection in Cumberland; (2) a case of localised type reported by myself—infection in South America (*Brit. Journ. Derm.*, 1911, vol. xxiii, p. 239); (3) a doubtful case by Ofenheim (*Lancet*, March 11th, 1911).

were not "open," but covered by skin, which was thinned and perforated with numerous holes through which there discharged serum and pus. The legs especially were thickly studded with these cribriform patches, which were deeply pigmented, almost black (Fig. 2). The lesions resembled in some degree multiple syphilitic



FIG. 1.—Multiple sporotrichosis. Shows the back of the patient with several lesions involving the skin and similar to those seen and described in Fig. 2. There are also a few deeply seated gummata (the earlier stage of the lesions). The areas included in the dotted lines were the sites of gummata.

gummata. They also somewhat resembled tuberculous abscesses. But they were not typical of either of these affections, and both Wassermann and tuberculin tests gave negative results. The case indeed at once suggested the multiple gummatous sporotrichosis described by de Beurmann and by other French observers, and a cultural examination proved this diagnosis to be correct.

The cultures (Figs. 3 and 4) were obtained by the method recommended by de Beurmann. About 1 c.c. of pus was withdrawn from an unbroken gumma by means of a small exploring syringe, and

squirted on to the surface of a sloped glucose-peptone-agar tube. The tube was kept at room temperature and uncapped. In ten days' time white points or tufts (soon becoming dark brown) appeared here



FIG. 2.—Multiple sporotrichial ulcerating gummata. There are deeply pigmented areas, the skin over which is cribriform and covers a pocket containing pus. These lesions evidently result from gummata which have involved the skin and discharged their contents through the numerous small openings. The lesions were only slightly raised above the level of the skin, and their margins had little or no appearance or feeling of infiltration.

and there in the spread-out pus. From these subcultures were made, and the characteristic dark brown convoluted growths of sporothrix

were obtained. A nodule was removed for *microscopical examination*. This showed the mixed tuberculoid, syphiloid and ecchymatoid types of infiltration, as described by de Beurmann. At one part there were epithelioid cells and giant-cells, at another collections of plasma-cells, and at another groups of polynuclear leucocytes. As was usual no sporotrichial elements were discovered in smears or in the sections.

The *course of the case* while in hospital had presented some incidents



FIG. 3.



FIG. 4.

FIGS. 3 and 4.—Cultures of sporotrichium from the case exhibited, on glucose-peptone-agar, grown at room temperature. The culture has at first a pale grey, downy appearance, but soon becomes darker in colour, pasty and convoluted, as in the photographs.

of special interest. During the first few weeks fresh lesions continued to appear, and the temperature rose occasionally to 100° F. When the diagnosis of sporotrichosis was made, potassium iodide (the drug which is known to cure sporotrichosis) was given in increasing doses until the patient was taking 3 drms. daily. Rapid improvement took place in the skin condition. The ulcers healed, and the gummata for the most part disappeared. But the patient began to have an irregular rise of temperature to 101° to 103° F. This first took

place after opening a very large gummatous lesion on the back, but also soon after the potassium iodide was first administered. Then there developed an attack like "acute rheumatism." The left hand and fingers, the elbows, the right foot and ankle, became very much swollen and very painful on movement. The temperature was from 101° to 103° F. The swellings round the joints were œdematous, but there was obviously also fluid in the joints and tendon-sheaths. It was now decided to discontinue the potassium iodide and to give a sporotrichial vaccine. But on discontinuing the medicine the temperature fell to normal and the joint-swelling rapidly disappeared, and the vaccine was not given. But several fresh gummata appeared. The potassium iodide was again given, and the fever and the joint-swellings returned, to subside at once when the drug was again omitted. This occurred several times—immediately the potassium iodide was given the fever and synovitis returned. As one member of this Section had suggested, this seemed to be analogous to Herkheimer's reaction in syphilis.

The occurrence of acute synovitis in sporotrichosis was not uncommon, and De Beurmann had written as follows: "Sporotrichial synovitis may simulate acute coccal synovitis, subacute gonococcal synovitis and synovitis of chronic tuberculosis. In the presence of acute, subacute or chronic synovitis one must now systematically discuss a mycotic infection."* At the present time the patient was free from synovitis; the ulcers were all healed, but they had left deeply pigmented scars; the nodules had all disappeared. It could not be said that the patient was cured, for the fact that the joint trouble was lighted on administration of potassium iodide suggested that there were still foci of disease in their neighbourhood.

Dr. A. M. H. GRAY showed a case of *onychogryphosis*. The patient was a lady, aged 62 years, and was at present under the care of Dr. Batty Shaw in University College Hospital on account of cardiovascular trouble. The nail condition was probably due to the fact that, owing to her stoniness, she had had difficulty in cutting her toenails for five or six years. The case was shown owing to the marked degree of deformity.

Dr. A. M. H. GRAY also showed a case of *seventh and eighth nerve*

* *Les Sporotrichoses*, p. 347.

paralysis after neo-salvarsan injection. The patient was a young man, aged 22 years, whom he saw on October 17th, and he then had a typical secondary syphilitic eruption all over him. He was taken into hospital and given 0·9 grm. of neo-salvarsan. As the symptoms cleared up he did not come for further treatment, although warned to do so. Six weeks after the injection he became deaf on the left side, and noticed that the left side of his face did not move, and he complained of considerable pain behind the left ear. A point of distinct tenderness was detected over the left mastoid. He attended the Medical Out-patient Department and was seen by Dr. T. R. Elliott, who found that he had in addition complete facial paralysis on the left side and complete left deafness. There was also slight left-sided weakness, associated with ataxia and marked coarse nystagmus when looking to the right, and a fine nystagmus when he looked to the left. The sense of taste appeared to be somewhat diminished on the left side. This patient, who had had syphilis, had obviously had insufficient treatment, and had developed, apparently, a localised lesion in his internal auditory meatus, which was most probably syphilitic in nature. It might be a localised syphilitic meningitis in the internal auditory meatus, or thrombosis of the auditory artery. It did not appear to be a neuritis, nor an affection of the nuclei of the seventh and eighth nerves.

Dr. PRINGLE said his experience of salvarsan in syphilis was small as compared with that of some other Fellows. The only accident he had observed after its use was unilateral tinnitus and deafness: this he had noticed in two cases, both in the early secondary stage, and occurring soon after injection. He would hazard no opinion as to whether the symptoms were the result of the disease or of the remedy; but before the introduction of the latter he had never personally encountered a similar complication.

Dr. PERNET said he had a case some time ago sent to him from the Continent, in which the patient had had four intra-venous injections of salvarsan (doses unknown). The last injection of the series had been given six weeks before Dr. Pernet saw him (Case Book 1, fol. 443), when the patient complained of deafness. A few days later facial paralysis had developed. He then presented much the same symptoms as the patient before them.

Dr. WILFRED FOX said he had had two cases in which herpes developed after the use of salvarsan; in one after intra-venous injection, and in the other after intra-muscular. Joha was the preparation used for the latter.

Mr. McDONAGH said he had seen two or three syphilitic cases which had never had treatment develop into the condition which the present patient had, consequently he did not attribute this man's lesion to the salvarsan, but to the disease. A guarded prognosis should always be given, because though some of these cases

cleared up, others remained *in statu quo*, however vigorous treatment might be, but nevertheless active treatment should invariably be prescribed. He had shown a case of eighth-nerve paralysis in a patient who had not had "606," but only mercury, and she was still as bad as when he first saw her. He had at present under care a syphilitic male patient with paralysis of seventh and eighth nerves on one side, which in spite of six injections of "606" and mercury left him no better than when he first sought treatment; in this case the paralysis occurred three months after the primary sore was first noticed. He had seen cases of syphilitic neuritis of the sciatic nerve and of the brachial plexus which salvarsan did not improve immediately, not until three to six months had elapsed since beginning treatment. Therefore in all cases of syphilitic inflammation of nerve-tissue, all hope of improvement should not be given up until the patient had been well treated and kept under observation over an extended period.

Dr. WHITFIELD said he agreed with Mr. McDonagh as to the influence of salvarsan. He had only had one case of severe early symptoms in syphilis. It was the case of a woman who was under mercury, and had had no salvarsan at all. In a fortnight she went stone-deaf. Mr. Cheate saw her and said it was the acute auditory paralysis of secondary syphilis. At the time of the onset of the deafness all the other symptoms of syphilis (rash, sore throat, etc.) had disappeared. Mr. Cheate advised treatment with salvarsan, and this was administered, but no good effects were observable six weeks later. Since then Dr. Whitfield had not seen the patient, but he had heard from another patient that the deafness had ultimately cleared up. He regarded the recovery as being due to natural cure and not to the efficacy of the treatment.

Dr. MACCORMAC said he had seen one case of seventh-nerve paralysis in a patient who had had salvarsan, and it cleared up after a second injection of that substance. He considered the paralysis was due to the syphilis, not to the salvarsan.

Dr. F. PARKES WEBER referred to a man, aged 34 years, whom he had at present under care in the hospital, who had tertiary syphilitic trouble and gave a positive Wassermann's reaction. He was given salvarsan—namely, an intravenous injection of 0.6 grm. on October 26th, and another one of the same amount on November 5th. On November 7th he complained of weakness and giddiness and disliked the noises in the street. In the night he had headache and could not sleep, but there was no vomiting. Next day he remained in bed (November 8th), and in the afternoon did not answer questions when spoken to. On November 9th he was admitted under Dr. Weber's care, at the German Hospital, in a state of stupor. In the hospital there was left-sided facial paresis, but of the cerebral (lower face) type, not (as in Dr. Gray's case) of the facial nerve (whole face) type. The patient improved very much, but there were now peculiar emotional symptoms (exaggerated tendency to smile, etc., suggesting a "pseudo-bulbar" bilateral cerebral origin). For a short time treatment by mercurial inunction and iodide of potassium had been employed.

Dr. WHITFIELD asked what grounds Mr. MacDonagh had for saying the clearing up of the case he mentioned after three months was due to salvarsan. The usual experience was that if symptoms did not show signs of clearing up after salvarsan in a fortnight, then it did not do so at all.

Dr. GRAY replied that the Wassermann reaction in this patient was positive. Since a second injection four days ago he said he could hear a little. In the

pre-salvarsan days it was found to be difficult to get such cases to clear up with mercury. He thought that there might be different types of eighth-nerve lesion, for many of the recorded cases had been bilateral, and one could not understand that on a localised inflammatory hypothesis. Some recorded cases of the kind had cleared up without treatment. Other cases got worse when the arsenic was given, and improved when it was left off.

Dr. J. J. PRINGLE showed *four cases of angiokeratoma from one family*. The affected members were: the father aged 46 years, a boy aged 17, a boy aged 13, and a boy aged 8. There were no other male members of the family. All four showed classical angiokeratomata on the hands, and to a less degree on the feet. They all suffered from severe perniones, leaving deep scars, and had extremely pronounced "chilblain circulation." The father and eldest boy—both of whom described themselves as suffering from phenomena tantamount to Raynaud's disease—presented marked "sclerodactylia" with necrosis of the finger-tips.

The father and two elder boys showed unmistakable evidences of tuberculous disease of the lungs or joints. The youngest boy as well as the mother and the one existent sister presented no signs of tuberculosis.

The exhibitor had not had the opportunity of thoroughly studying the cases, but he called attention to the *familial occurrence* of angiokeratoma in them, which was a new point to him. He also referred to the association of angiokeratoma with tuberculosis, which had often been noted, although wide divergences of opinion existed as to the relationship between the two conditions and its interpretation.

Dr. H. C. SEMON, M.D., showed a *case of Raynaud's disease*. The patient, a woman, aged 56 years, came with a seven years' history of recurrent local asphyxia of fingers, toes and nose. The tip of the fingers of the right hand had become gangrenous since September. Wassermann was positive, but she had had no miscarriages and no other symptoms pointing to syphilis.

Dr. GALLOWAY said that he always found difficulty in making the diagnosis of Raynaud's disease in the type of case now shown. It was not sufficient foundation for the diagnosis that the patient suffered from a chronic variety of gangrene of the tips of the fingers and toes. In this patient the disease had commenced a few years ago, when she was already aged forty-nine. When the possibility of disease of the blood-vessels produced by various causes, specially resulting from earlier syphilitic infection, had to be taken into account, the likelihood of the

existence of uncomplicated Raynaud's disease diminished. In the case of persons such as the patient before the Section, whose position in life had involved overwork and strain of various kinds, the likelihood of disease of the blood-vessels was greater than in those in a more favourable condition of life. Factors in the causation of the disease such as those mentioned must be borne in mind, so that the later in life that pain in the extremities with terminal gangrene occurred, the less was the likelihood of the case being a simple Raynaud's disease, and the more likely was it due to disease of the vascular system, and the consequence of an imperfect terminal circulation. It must also be recollected, in cases of terminal gangrene clearly associated with endarteritis and arterial degeneration, that attacks of pain, pallor and congestion of the extremities succeeded by gangrene usually showed paroxysmal features. It might possibly be argued that the Raynaud phenomena might more easily develop in the case of a patient already affected by disease of the peripheral blood-vessels. Speaking generally, however, it might be said that the later in life the symptoms resembling Raynaud's disease developed, the less likely was the attack to be an uncomplicated case of this condition.

Dr. WHITFIELD pointed out that when Raynaud described his cases he had not the advantage of the Wassermann reaction. In this woman there was no history of syphilis. Most of the cases of Raynaud's disease which he had seen showed a positive Wassermann, and even young patients with Raynaud's disease might have congenital syphilis. Apart from hæmoglobinuria, the classical symptoms of Raynaud's disease were spasmodic syncope, anæmia followed by cyanosis, with gangrene as a late development. This patient had all these and the disease was symmetrical. He did not see how one could have that repeated spasmodic symmetrical condition from endarteritis unless every artery in the body was involved, and that was not so in this patient. Possibly it might be a system disease, akin to the general paralysis of the insane.

Dr. F. PARKES WEBER said it was difficult in such a case to explain how syphilis could be the direct cause of the gangrene. For a long time the two chief predisposing causes of Raynaud's symptoms had been supposed to be syphilis and malaria, of which the first had the better claim of the two. Dr. Weber himself believed that syphilis was the chief *predisposing* cause of Raynaud's phenomena (at least, of the gangrenous form of Raynaud's phenomena), but syphilis was not sufficient to account for the gangrene in a case like that of Dr. Semon's. In other words, syphilitic arteritis could not be so distributed as suddenly to give rise to an obstructive (not merely angiospastic) gangrene, involving all, or nearly all, the finger-tips of both hands. There was, however, some room for doubt in cases when only one or two finger-tips or toes were affected, especially if, in addition to a history of syphilis, there were active malaria present, as in the case of a sailor, aged 41, formerly under Dr. Weber's care, with toe-gangrene. Malarial parasites were found in that patient's blood, and he gave a history of having had syphilis seven years previously.*

Dr. SEQUEIRA said that at a recent meeting he showed a man, aged 60, with necrosis of the terminal phalanges on one side of the hand, and it proceeded to

* F. P. Weber, "Raynaud's Disease in a Malarial Subject," *Trans. Med. Soc., Lond.*, 1909, xxxii, p. 370. Cf. Sir W. Osler, "A Case of Multiple Gangrene in Malarial Fever," *Johns Hopkins Hosp. Bull.*, Balt., February, 1900.

one or two toes. The Wassermann reaction was negative, and there was no history of syphilis. The man believed himself to be gouty, and described the picking out of chalk-stones, but he had no tophi. Though there was a history, seven years before, of a similar attack of necrosis, he hesitated to class it as Raynaud's disease. He had neither malaria nor hæmoglobinuria.

Dr. PERNET said he did not see how this case, with the paroxysmal bilateral symptoms described, could be due to syphilitic endarteritis. Where syphilis was responsible for gangrene, the lesion in his experience was unilateral and terminal (the big toe for instance).

The PRESIDENT remarked that in the pre-Wassermann days a large number of cases had been shown as cases of spasmodic Raynaud's disease in which there was no ascertainable history of syphilis.

Dr. PRINGLE was, of course, aware that a positive Wassermann reaction was commonly present in cases of Raynaud's disease. He was, however, unaware of what its connection with syphilis was, or was supposed to be; and he could not conceive it to be an essential one. He could not see any incompatibility in the divergent views as to the nature of the vasomotor conditions in Raynaud's disease expressed by various Fellows. Might not spasmodic vascular phenomena be superimposed upon organic syphilitic arterial disease? Might not the latter actually predispose to the former?

Dr. J. H. SEQUEIRA showed *an unusual form of rodent ulcer*. J. F—, aged 44 years, was first seen at the London Hospital on November 7th, 1912. He was suffering from an extensive crusted eruption on the left cheek. The appearances strongly suggested a tertiary syphilide. The patient stated that seven years ago a small "pimple" appeared on the left side of his nose. Its exact site was the sulcus between the ala nasi and the cheek. The growth gradually increased until it formed a large "red patch." After some time this healed up, but at the upper margin a fresh outbreak occurred under the left lower eyelid, and this gradually spread during five years, until the whole of the left cheek was affected. About twelve months ago the lesions began to discharge some "thin yellowish matter," and this came from numerous "small sores" which had never healed properly. Six months ago a deep ulcer developed at the left angle of the mouth, and a little earlier the outer canthus of the left eye was attacked. The sole application had been a widely advertised ointment. With the numerous small rounded crusts the appearance strongly suggested multiple gummata, and this was supported by the history that the patient had had a penile sore fifteen years ago, and that he had had treatment by pills for fifteen months at a general hospital. He, however, denied ever having a rash or sore throat, and his hair had not fallen.

Mercury and iodide of potassium were first prescribed, and the crusts were removed by fomentations and the white precipitate ointment. As soon as the crusts were removed it was obvious that the case was one of rodent ulcer, for the margin of the lesion near the outer canthus of the left eye and of the one at the angle of the mouth had the characteristic beaded edge. The appearance is well shown in the accompanying photograph. The major portion of the left cheek was covered by superficial scar-tissue, with a few telangiectases. Scattered over the scar were numerous raised,



Unusual form of rodent ulcer.

rounded, pinkish growths, varying from a millet-seed to a split-pea in size. Some of them showed a tendency to central ulceration. At the outer canthus there was more extensive growth in the form of a raised, irregular, somewhat festooned beaded edge surrounding an ulcer which exuded a thin, sanious discharge. At the angle of the mouth there had been more destruction, and there was considerable deformity. The ulceration extended to the muco-cutaneous junction, but did not involve the buccal mucosa. Here there was a wide, raised margin, and considerable gummy discharge.

The Wassermann reaction was negative. A portion of the growth was excised and examined microscopically. It showed that the neo-

plasm was a basal-celled carcinoma. The rodent growth was evidently of the superficial cicatrising type, and the rounded nodules left in the scar-tissue were portions which had not cicatrised, or, possibly, recurrences.

In the exhibitor's experience, rodent ulcer of the cicatrising type usually occurs on the forehead and temples, above the zygoma, and he had attributed this superficial localisation to the toughness of the fascia which has its lower attachment along the zygoma, the basal-celled carcinomata often being brought to a halt in their development by the presence of a tough fibrous membrane. The resemblance to a gummatous ulceration was striking, and, with the history, the diagnosis of syphilis was natural. The fact that the Wassermann reaction was negative after only eighteen months' treatment by pills is strongly in favour of the patient never having had syphilis. There was no evidence of past syphilitic lesions on the skin or mucous membranes.

Dr. PERNET said that when he was a dresser to the late Marcus Beck, a case was in the wards which was looked upon as syphilitic, but which proved to be a rodent ulcer. It was deeper than in this case, and occupied somewhat the same region; it encroached on the orbit, and eventually became very destructive, going down to the bone. The patient was put upon iodide of potassium, and there was a good deal of improvement, but only up to a certain point. It was then referred to the late Dr. Radcliffe-Crocker, who diagnosed rodent ulcer.

Dr. WILFRED FOX said there was under the care of Sir Malcolm Morris, at the Seamen's Hospital, Greenwich, a sailor suffering from rodent ulcer with a similar condition to that described by Dr. Pernet. It was on the nose, was cured by zinc cataphoresis—this was before the days of radium—and the patient went away to sea. He remained all right for eighteen months, then came back with a recurrence, which was cured by X-rays. He remained well for a year, then returned with the condition breaking down. X-rays were thought to irritate him, and cataphoresis was resumed, but it ended in disaster, because the growth began to penetrate his nasal cavity; the bone was exposed, and it spread to the orbit. As it had then become a surgical case, the surgeon was asked to clear out the orbit. The surgeon diagnosed tertiary syphilis, and said he would cure it by iodide of potassium. Microscopical specimens showed its nature, but the iodide of potassium was given, and it improved very much. Then the improvement ceased, and progress was in the undesirable direction.

MANCHESTER DERMATOLOGICAL SOCIETY.

ORDINARY MEETING held on Friday, December 13th, Dr. G. H. LANCASHIRE in the chair.

The minutes of the previous meeting were read and confirmed.

Dr. LANCASHIRE showed (1) *a case for diagnosis*. The patient, a girl, aged 13 years, presented lesions on the face which had developed since infancy.

The cheeks, forehead, nose, temples and eyebrows were studded with innumerable pitted depressions, the size of a pin's head. These pits were closely set together with intervening bridges of waxy-like skin. The general appearance roughly suggested *Acne atrophica*. Other features present were: (1) Loss of hair on the eyebrows. (2) Slight telangiectasis in the affected areas. (3) Absolute symmetry. (4) A few isolated black comedones, no bigger than a pin's head, with slight follicular inflammation round them.

(2) *Papular tuberculide*. The patient, a young woman, presented the typical lesions of a papular tuberculide. The lesions were plentiful on the face and forearm, and were in all stages, from small subcutaneous nodules to well-raised papules having clear-cut necrotic centres. Scars from old lesions were plentiful. On the forearm the lesions were situated chiefly on the flexor aspect, and were reddish-violet in colour.

Since being admitted as an in-patient she had made considerable improvement, due to rest in bed, cod-liver oil, and X-rays. It was interesting to put on record that although 5 per cent. (Koch's) tuberculin ointment had been applied, no reaction had followed.

(3) *Acne keloid*. The patient, a man, aged 30 years, for the last six months had presented all the usual physical signs of this condition. The case was interesting from the unusual situation of the lesions, namely, the right parieto-frontal region of the scalp.

Dr. R. PROSSER WHITE showed (1) *a case of Lupus vulgaris* in a woman, aged 30 years. The whole of the anterior and lateral aspects of the left thigh and leg were the site of extensive *Lupus vulgaris*.

There was extensive ulceration at the junction of the middle and lower third of the same leg. The condition had been present since early childhood.

Quite recently there had been an acute outbreak of the same condition on the nose.

(2) J. N—, male, aged 45 years, suffering from *Dermatitis herpetiformis*. For the last two years the patient has been troubled with periodic outbreaks of a grouped bullous eruption. This eruption was very irritable. When shown to the Society the patient had no bullae, but a few erythematous lesions with evidence of irritation, as shown by scratch marks, also some darkish-brown stains scattered irregularly over the trunk.

Dr. SAVATARD showed (1) *Lymphangioma circumscriptum* in a girl, aged 17 years. This case had been previously reported in the *Lancet*, November, 1912, by Mr. Telford, as a case of hemi-hypertrophy of the right side due to naevus growth.

The vesicular eruption had first made its appearance twelve months previously; although many lesions had disappeared fresh ones continued to appear, and the condition was progressive. The lesions were situated mostly at the periphery of the naevus, but in the femoral region there was a large cluster over what was apparently a deep-seated naevus. The lesions varied from clear translucent to hæmorrhagic vesicles and some few had become warty in character.

(2) *Lupus erythematosus* in a man, aged 56 years. The eruption was wide-spread and localised to the scalp, face, neck, chest and back. The onset commenced acutely on the scalp in August last.

When first seen in November the lesions on the chest and back, which were and are still typically follicular in character, and were then decidedly yellow in colour, were thought to be seborrhœic; latterly, however, the exhibitor had come to the conclusion that this eruption was also of the same character as that on the face and neck, the features presented being modified by its localisation.

On the neck some absorption had taken place, leaving only a slight degree of atrophy, whilst in both this situation and on the scalp numerous hair-follicles had not been destroyed by the disease. The patient's general condition was good.

(3) *A youth, aged 18 years* (previously shown as a case for diagnosis

in February, 1912), with small pitted scars on both cheeks, with slight surrounding telangiectasis. The lesions were symmetrical, but more evident on the right than on the left cheek, and their follicular origin was also more apparent on this side of the face. A few small-sized comedones were present. (This case was shown to compare with the case shown by Dr. Lancashire.)

(4) *Pustular herpetiform dermatitis* (? *Impetigo herpetiformis*) in a woman, aged 57 years. The eruption commenced on the face in June last.

She was first seen at hospital in August last, the face at that time presenting the appearance of a crusted impetigo. The following week it was discovered that the condition extended over the whole trunk and the upper portion of the thighs. She was admitted as an in-patient on August 26th, being seriously unwell. The eruption spread in pustular herpetiform crops. The mucous membranes were not affected. The lesions were pustular from the first, each outbreak being heralded by a rigor accompanied by rise of temperature, the chart suggesting that of a remittent fever. She complained of no discomfort except smarting when the dressings were removed. As local dressings an ointment containing sulphur gr. x, camphor and carbolic acid aa ʒ xv, paraffin molle ad. ʒj had proved most suitable.

Quinine in four-grain doses had been administered, at first with good results; later an autogenous vaccine was administered; at first this seemed efficacious, but as relapses occurred she was again put on quinine. No micro-organisms had been detected in the blood, but various cocci were found in the pustules.

When shown the appearance of the patient suggested a case of *Dermatitis herpetiformis*.

The last outbreak, when she had no rise of temperature, had appeared in the groin, and from that situation had spread on to the abdomen.

CURRENT LITERATURE.

DERMATITIS SYMMETRICA DYSMENORRHOICA. (*Archiv f. Derm. u Syph.*, October, 1912.)

THERE are three papers on this interesting syndrome in the current *Archiv*. Two of them (Kreibich's and Mathes') are analytical and discursive; in the other, by Friedeberg, there is a full account of an actual case, and some experiments on which he bases his conclusions as to the aetiology. Matzenauer and Polland in the March issue of the same periodical were the first to describe the condition and claim for it a clinical entity. The patients are always women with dysmenorrhœa, and there are always accompanying disturbances of the heart and vaso-motor systems, and not uncommonly psychical abnormalities. The skin-lesions appear in chronic sequence, are almost invariably symmetrical in distribution, and present the picture of a moist dermatitis, an urticarial erythema or a spontaneous necrosis.

In the case described in detail by Friedeberg—a woman, aged 30 years—there is a history of dysmenorrhœa associated with psychic symptoms. On her first visit to the clinic and for some time subsequently, the lesions about to be described were regarded as artefacta. During her detention there, however, in spite of the most careful supervision by night and day, no evidence of this was ever forthcoming.

Their appearance, mostly nocturnal, was always ushered in by an intense burning sensation which awoke the patient. The seat of this sensation became shortly erythematous, and later urticarial in appearance. If the condition progressed the upper epithelial layers were lifted off, and bullæ made their appearance, or small vesicles amalgamated. Their contents rapidly dried up and brownish-yellow crusts resulted, which fell off in the course of a few days leaving behind them darkly pigmented spots—the evidence of past attacks of the malady in several positions.

The sites attacked also resembled very closely those affected in Matzenauer and Polland's cases.

It began on one side of the face, spread thence to a contra-lateral position, thence to the trunk on its anterior aspect, the arms and legs in symmetrical sequence. The dorsal aspect of the trunk and extremities remained free.

In his discussion of the aetiology Friedeberg emphasises the menstrual history, which had been highly irregular and amenorrhœic in type. He believes in H. W. Freund's theory that pathological alterations of the metabolism may result as a sequel to abnormal menstruation, and that such disturbances may have their clinical manifestation in certain unexplained skin-lesions. According to the researches of Hamburger and Neumann lipid substances, such as the ester of cholesterin, are present in abnormal quantities in the blood of pregnant women. This they ascribe to an intermission of the normal excretion of such, in the Graafian follicle, as occurs during menstruation, and it is the cholesteramia (or other accompanying toxins *not* found by him) in the case described that he offers as a possible explanation of the ensuing skin-lesions.

He cites other experiments by Schlickele, which suggest the presence of an

antithrombin and a depressor substance in the expressed tissues of ovary and uterus in support of the view that toxic substances may easily reach the circulation from this source if its functions are disorganised.

A different view of the pathology is taken by Prof. Kreibich, who considers that the lesions have an angioneuritic basis, and brings forward a considerable amount of evidence in support of his opinion.

Yet a third authority, Prof. Matthes, criticises the views of Matzenauer and Polland. He maintains that their conclusions, based on the work of Neumann and Hamburger (see above), are too far-reaching and too insecurely established, and agrees with Prof. Kreibich's theory of an angioneurosis.

H. C. S.

A CASE ILLUSTRATING THE LUETIC PHENOMENON OF EHRMANN. CARL SCHMIDT. (*Archiv f. Derm. u. Syph.*, October, 1912.)

EHRMANN first in 1907 described the occurrence in the late secondary stage of dark blue or livid spots interspersed among the better-known syphilitic exanthems. These spots in his cases were livid or cyanotic in colour, reminding of post-mortem hypostasis, and showed a peculiar racemose configuration over their macular surfaces, which in extent varied from 3*d.* to 1*s.* in size and shape. He termed them *Livedo racemosa*, and described their histopathology as dependent on an endothelial proliferation in the arterioles of the subpapillary and subcutaneous plexuses, leading to concentric and excentric diminution of the lumina, and destruction or great weakening of the elastic fibres, so that the blood-current through the veins during diastole was much slowed down, and thus gave rise to the livid racemose appearance alluded. The author (Carl Schmidt), whose case differed somewhat from those of Ehrmann (1) in occurring three-and-a-half months instead of two years after infection; (2) in appearing on the face, as well as on the trunk and extensor surfaces of the arms and thighs and buttocks; and (3) in yielding more rapidly to treatment (Hg., salicylate injections and salvarsan), is unable to agree with Ehrmann on the histological basis of the phenomenon. He finds no arterial change whatever, but marked cellular infiltration round the hairs and sweat-follicles and ducts, and a very marked endo- and periphlebitis in the same vascular regions as Ehrmann described for his arterial proliferation. To this latter feature he ascribes the macroscopical appearances.

H. C. S.

THE CAUSATION OF LEUCODERMA SYPHILITICUM. GEBER. (*Archiv f. Derm. u. Syph.*, October, 1912.)

As a result of a histological study of a large number of cases in various stages of syphilitic infection, the author comes to the conclusion that *Leucoderma syphiliticum* is due, not to a destruction of pigment by the spirochætæ or their toxins, but to a functional damage of the pigment-manufacturing cells of the basal cell layer of the epidermis brought about by the same agency. In proof of this assertion he states that in very early cases, where the leucoderma is incipient, he has been able to show microscopically in serial sections a typical syphilitic infiltration in those regions in the subcutis which exactly underlay the pale areas on the surface. This infiltration is characterised by the usual phlebitis and periphlebitis, which no doubt interfere with the nutrition not only of the

pigment-forming cells, but even in cases of specific alopecia with such comparatively hardy structures as the hair-follicles and sebaceous glands. Such a theory also accounts for the length of time required for the restoration of pigment to the depigmented areas.

H. C. S.

A CASE OF PAPILLOMA ACUMINATUM OF THE LIP. WAGNER.
(*Archiv f. Derm. u. Syph.*, October, 1912.)

THE history, clinical and laboratory examinations of this patient excluded a venereal or tubercular aetiology for the condition, which the author ascribes to traumatism caused by pipe-smoking. The patient had suffered from the condition for twenty years, and after fruitless attempts to cure by cauterisation, etc., was ultimately cured by free excision and plastic repair. The tumour, which he describes as "coxcomb-like" is excellently portrayed on Taf. xii of the current *Archiv.*, and its histological picture was in complete agreement with the clinical diagnosis.

H. C. S.

NOTICE.

WE have been asked by the Medical Committee of the Cancer Hospital to draw our readers' attention to a course of clinical lectures on the diagnosis and treatment of cancer, to be given at the Cancer Hospital, Fulham Road, S.W., on Wednesday afternoons at 5 p.m. The course will consist of ten lectures, of which the following is the complete list: January 22nd, Mr. W. Ernest Miles, "Cancer of the Rectum"; January 29th, Mr. R. H. Jocelyn Swan, "Tumours of the Kidney"; February 5th, Mr. Joseph Cunning, "Malignant Disease of the Colon"; February 12th, Mr. Charles Ryall, "Cancer of the Tongue"; February 19th, Dr. T. J. Horder, "The Diagnosis of Cancer of the Stomach"; February 26th, Mr. Cecil Rowntree, "The Treatment of Inoperable Cancer"; March 5th, Mr. J. Howell Evans, "Cancer of the Breast"; March 12th, Mr. Harold Wilson, "Cancer of the Uterus"; March 19th, Dr. Robert Knox, "The Radium Treatment of Cancer"; March 26th, Mr. Archibald Leitch, "Laboratory Diagnosis of Cancer."

The clinics will be held in the Museum of the Hospital, and will be illustrated by cases and microscopic and other specimens. All medical men and senior students will be welcomed. The nearest underground station to the Hospital is South Kensington.

THE BRITISH JOURNAL OF DERMATOLOGY.

FEBRUARY, 1913.

ON A SMALL EPIDEMIC OF AN AREATE ALOPECIA.

By T. COLCOTT FOX, M.B., F.R.C.P.,

Physician for Diseases of the Skin to Westminster Hospital, and Visiting Dermatologist to the Metropolitan Asylums Board's Downs School for Ringworm.

It has fallen to my lot to observe a small epidemic of a curious form of alopecia, which greatly interested me, and I therefore record it as it may be of interest to others. I regret that the record is unsatisfactory in so far as I failed to determine the cause. My thanks are due to the courtesy of Dr. Cross (the medical officer at the Bethnal Green Schools at Leytonstone), who willingly supplied me with information.

Edith H— was the first case detected, and at an early stage, and she had been in the schools for over two years. This girl was sent to the Downs School on March 27th, 1907, with the disease under discussion, discharged April 24th, 1907, readmitted to the Downs School October 21st, 1908, discharged again on March 11th, 1909, and readmitted to Downs School October 20th, 1909, always with alopecia.

On October 20th, 1909, fifteen girls were admitted to the Downs School affected with little bald patches. On October 27th two others were admitted, one on November 11th, and three on November 17th, making twenty-one in all.

The patients were all girls sent from the Bethnal Green Schools at Leytonstone, and all came from one house at the schools. The ages ranged from 9 to 14 years. There were 2 cases of 9 years of age, 4 aged 10, 7 aged 11, 2 aged 12, 3 aged 13, and 3 aged 14.

All these girls had copious long hair, and many of the alopecia

patches were so comparatively insignificant that the Matron Superintendent and her staff and the visiting doctor (Dr. Cross) are to be heartily congratulated on their efficient supervision of the children, leading to the early detection of the malady, for it is well recognised how easily the little areas of some endothrix ringworm may gain entrance and spread in institutions.

The patches ranged from the size of a finger-nail to a shilling, and one was only that of a split-pea, but all were at an early stage. Two were lanceolate and about one and a half inches long. The surface was not burnished and not markedly scaly; most were nearly denuded of hair, but for the most part retained some typical note-of-exclamation atrophied stumps, firmly fixed, and in some patches had these stumps on the border. Many had follicles from which hairs had fallen plugged with dark pigmented *débris*. Lastly the borders were not definitely circumscribed, but minute bays ran out into the surrounding hairy part.

In almost all the cases there was only a single patch, and this might be located on any part of the scalp. In one case there were three macules.

These cases were certainly alopecia, but had a special and similar aspect in every case, and I concluded the type was a special one. Repeated microscopical examinations of the stumps and plugs failed to disclose any organism. I brought away hairs and plugs and scrapings which I stained, but still failed to find any organism, nor could I cultivate any.

I repeat that all these cases were seen at an early stage, and I cannot say whether, if neglected, they would have developed further. They readily yielded to the application of an unguentum hydrarg. oxidi rubri with cantharides and no further patches developed.

In my experience any evidence of the contagion of Alopecia areata in London is very scanty, though the disease is very common. I have seen many examples of family Alopecia areata in which members of a family were affected at different ages, but without the striking evidence of contagion seen in ringworm, and the tendency to recurrence is very striking in contrast to ringworm.

The clinical features were clearly those of an areate alopecia, but had some special features which I find it difficult to express. The patches were small, of a very quiet evolution, single, or two or three

at most, often oval or lanceolate in shape, with pigmented epithelial plugs on the denuded areas, and a few typical clavate stumps on the borders, and they yielded readily to treatment. Here I may say I have had experience of the very rare concurrence of ringworm and Alopecia areata, but have never seen proof that the alopecia may directly be a sequence of ringworm. It would not be surprising if



these two affections, so common in childhood, should occasionally co-exist in the same person. That this concurrence is extremely rare is shown by the fact that out of the many thousands of cases of ringworm I have seen at the Downs School, not one single example has been met with.

The localisation of these cases in a single block of a school seems to exclude any such cause as some poisoning by ingestion of food. I may add that the children had been well cared for, and there was no trace of any impetigo, and the patches were not scars.

I do not propose to enter into a discussion of the different forms of Alopecia areata, or into the evidence for the contagion of some forms, as it will probably be fully discussed at the forthcoming International Congress in London. My own experience of ordinary Alopecia areata is that it is not contagious. It has been my practice to certify that cases are fit for school if the general health is good, but I have never had cause to regret it.

I will, in conclusion, only refer to two epidemics, the one described by Thomas Hillier in his handbook, and the other by Bowen, of Boston, U.S.A.

Thomas Hillier (*Handbook of Skin-Disease*, 1865) records an epidemic at Hanwell Schools, which contained 1100 children of both sexes, from six months to fifteen years of age. Girls of a particular block were only affected.

A girl had been suffering from aggravated alopecia for one or two months, freely associating with the others. Another child with a bald spot was observed, and a methodical search revealed thirty to forty cases, all girls, and in the course of the following week five or six fresh cases developed, and then it stopped.

Patches were of the same colour as rest of scalp and perfectly smooth; hairs immediately around loose or atrophied, and a few were note-of-exclamation stamps. Though clinically an alopecia, Hillier figures a trichophyton found.

I do not feel convinced that this was a ringworm outbreak.

Bowen, of Boston, U.S.A.,* reports a very interesting outbreak. A girl, aged 11 years, was found to have Alopecia areata; a few weeks later another was similarly affected, and four months afterwards sixty-three out of the sixty-nine children in the institution were attacked. All recovered except perhaps the original patient, who left to reside with a woman whose husband soon developed alopecia. The remarkable thing is that six years later the original patient was re-admitted to the girls' asylum, where all had been well, and in a few months twenty-six out of forty-five children were attacked.

Histological examination disclosed a remarkable atrophy of the pilo-sebaceous follicles, but no trace of micro-organisms was detected. The only peculiarity, Bowen noted, was the prevalence of

* *Journ. Cut. and Gen.-Urin. Diseases*, vol. xvii, September, 1899.

more irregular and smaller areas than are commonly seen in Alopecia areata.

Table of Cases at the Downs Schools.

Name.	Age.	Date of admission.	Description.	Discharge.
Florrie O—	10	Oct. 20th (few days) : a readmission	Little macule right occiput, and some further very early places, crown and vertex	Feb. 16th
Rose O—	11	Oct. 20th (few days)	Fourpenny-piece macule on vertex with broken stumps	Feb. 12th, 1910, readmitted Oct. 20th.
Ada S—	10	Oct. 20th (few days)	Two or three finger-nail-sized bald macules with some broken-off stumps tight in skin; some follicles with dark <i>débris</i> ; borders of patches irregular; top of crown and front	March 9th.
Ethel K—	11	Oct. 21st (few days)	Little patch on left parietal, thinned of hair with stumps tight in	Feb. 16th.
Maggie D—	13	Oct. 20th (few days)	Little bald place size of pea over right ear	Feb. 12th.
Rose C—	13	Oct. 20th (few days)	Patch size of a shilling, upper occiput; hairs thinned with broken-off stumps	Feb. 12th.
Jane R—	14	Oct. 20th (few days)	Patch size of a shilling over right ear with broken-off stumps	Feb. 12th.
Violet W—	9	Oct. 20th (few days)	Little finger-nail bald macule over right parietal with some atrophic stumps in margin, and second speck on vertex with stumps; streptococci	Feb. 23rd.
Emily W—	12	Oct. 20th (few days)	Little finger-nail-sized bald macule; rather wasted top of occiput; borders have broken off, stumps tight in	Feb. 12th.
Emma L—	11	Oct. 20th (few days)	Patch size of a two-shilling-piece over left ear thinned of hair but stumps left. Speck over right ear and black <i>débris</i>	Feb. 12th.
Lydia A—	14	Oct. 27th (few days)	Large lanceolate patch right vertex, scaly (been treated), with atrophied stumps tight in and black <i>débris</i> in follicles	Feb. 12th, 1910.
Maud M. F—	13	Oct. 27th (2-3 weeks)	Little bald macule size of a three-penny-piece with two whitish stumps; an atrophic stump; been treated	Feb. 12th.
Emily C—	11	Nov. 17th	Little spot size of a sixpenny-piece over left parietal eminence; a little scurfy; black <i>débris</i> in follicles a few long hairs left and atrophied stumps	May 7th.

Table of Cases—continued.

Name.	Age.	Date of admission.	Description.	Discharge.
Louisa R—	9	Nov. 21st	Patch size of a shilling right in front, on border of scalp; a little scaly about this region; a few atrophied stumps and black <i>débris</i> ; Pityriasis capitis	May 28th.
Nellie D—	12	Nov. 17th	Rather oval patch over right ear size of a shilling; scaly; hair thinned but many atrophic stumps; black <i>débris</i>	—
Marie M. T—	11	Oct. 20th (few days)	Small spot right side, like the other cases	Feb. 12th.
Ada R—	11	Nov. 17th	A little patch, size of a three-penny-piece, over right parietal; many hairs gone; some atrophic stumps	June 18th.
Edith H—	14	Oct. 20th (few days)	Oval patch; vertex with alopecia stumps; readmission	Feb. 12th.
Matilda W—	11	Oct. 28th, 1909 (few days)	A little thinned macule over left ear	Feb. 12th, 1910. Was rayed for T.T. year before, block 5.
Sophy L—	10	Oct. 20th, 1909 (18 days' duration)	Lanceolate band along the vertex with all hairs broken off and follicles swollen	Feb. 12th, 1910.
Annie M—	10	Oct. 20th, 1909 (few days)	Little finger-nail area on crown with broken-off stumps, but tight in	Feb. 12th, 1910.

A CASE OF NORWEGIAN OR CRUSTED SCABIES.

By WALLACE BEATTY, M.D.

Physician to the Adelaide Hospital, Dublin.

Ox November 18th, 1912, a man, aged 39 years, presented himself at the Dermatological Department of the Adelaide Hospital with a very remarkable condition of the skin.

He was a native of Galway and had never left Ireland. His family history revealed nothing of special importance.

He has a congenital deformity of the left thigh; it is undeveloped (achondroplasia), and he wears an iron apparatus affixed to his left boot to lengthen his leg and enable him to walk. Otherwise he is well formed, short, and of dark complexion. His general health has

been always good. His occupation had been a car-driver, but he had to give up work on account of the condition of his hands.

The eruption commenced ten years ago on his hands and fingers, and remained limited to his hands till about eight or ten months ago when it began to involve his body generally. About two years ago his hands were X-rayed in a Dublin hospital, the condition having probably been regarded as a form of hyperkeratosis. Latterly he

has been fearfully tormented with itching, and has lain awake night after night crying in misery.

Condition when first seen.—The scalp was abundantly covered with dry greyish scales, forming in places a thick coating resembling psoriasis.

There was some scaling on his forehead.

The trunk was universally reddened (erythrodermia), the skin somewhat thickened, especially of the back, and the surface was covered more or less abundantly with dry scales, causing roughness

in most places, but on certain prominent parts—shoulders, over scapulæ—the scales formed a thick, dry, hard, adherent coating; places on the back showed traces of moisture suggestive of an eczematous state. The skin of the abdomen was universally reddened, thickened and rough. There was an extremely heavy coating of dry adherent scales on the prominences of the hips over the trochanters

FIG. 1.



and on the buttocks, especially the right buttock, on which he always rested most owing to the deformity present on the left side; this coating was subsequently, when treatment was commenced, removed with extreme difficulty, much scrubbing being required to detach the scales.

The extensor aspect of the elbows was covered with thick heaped-up dry, adherent scales; the arms showed patchy redness and scaling, but were not universally affected.

The hands and fingers presented a remarkable appearance: pro-

FIG. 2.



FIG. 3.



TO ILLUSTRATE DR. WALLACE BEATTY'S CASE OF NORWEGIAN OR CRUSTED SCABIES.

jecting masses of dry greyish scales were present over and round the localities of the nails; these masses formed rocky, somewhat conical or irregular projections, and were evidently the result of implication of the nails and their surroundings. Here and there on the dorsum and borders of the hands and on the wrists were hemispherical, dry, dirty, scaly masses, averaging about 1 cm. in diameter, but some were larger; the surface of some of these masses was smooth, almost polished. One or two of these masses I removed with the blade of a forceps; they were detached rather readily once the edges had been raised all round; this method, however, of removal caused much pain, so the remainder were left for subsequent removal by softening in hot sulphur lotion as will be presently described.

The skin of the thighs and legs was partially affected, the affected places being reddened and rough; the flexor aspect of the knees was most affected.

The nails and their surroundings of the toes were affected in a similar (but slighter) degree to the fingers; scaly projections covered the disorganised nails; scaly masses were also present here and there on the feet.

At first sight the diagnosis promised to be difficult; the condition (obviously a most anomalous one) made me for a moment think of an unusual form of psoriasis—note the prominent, dry, greyish scaly masses and the implication of the scalp. This same thought had come to Prof. De Amicis, when he first examined his case which I shall presently refer to. As I was examining the patient he vouchsafed the information that his local doctor in Galway had told him that he was suffering from “neglected itch.” At once I recalled to mind the remarkable case of Norwegian scabies described and illustrated by Prof. T. De Amicis of Naples in the *Iconographia Dermatologica*. I then examined the hands for burrows; there were no definite cuniculi to be found, but I picked out an acarus from a spot which had some resemblance to an acarian eminence. A mass of scales removed from one of the scaly projections and heated with 40 per cent. solution of caustic potash was found, on microscopic examination, to contain (as Prof. De Amicis noted in his case) acari in all stages, ova, ruptured ova, larvæ, male and female animals. In the scales from the scalp, shoulders, and hips, as well as hands, vast numbers of acari were found. The case then became clear. Whether I should

have stumbled over the diagnosis for some time had not the patient made the remark about "neglected itch," I know not!

Treatment by sulphur soaping, sulphaqua baths and sulphur and Balsam of Peru ointment proved rapidly effectual. The rebellious places have been the finger-ends and toes. The masses of scales were extremely adherent and hard and the parts tender.

Examination of blood-films showed an excess of eosinophiles.

It is interesting to note that from the patient's own account the eruption remained limited to the hands and region of nails for nine years, with some itching about buttocks, and only became universal within the past ten months.

It is difficult to explain why scabies should assume this crusted form. It is curious that in my case a congenital defect was present, while in Prof. De Amicis' case there were rickets and a feeble constitution. Boeck's first case was in a leper.

The photographs were kindly executed for me by my friend, Dr. Jocelyn Smyly; they illustrate beautifully the condition present.

Note (January 29th, 1913).—The masses of scales on the nail-beds (the nails themselves being disorganised) are being gradually and painlessly removed by the application of a weak iodine tincture daily, and then boric acid lotion under oil-silk. The patient has been treated as an out-patient, so cure of nail regions is delayed. He is, however, quite free from irritation now and in perfect ease.—W. B.

A CASE OF SPOROTRICHOSIS SIMULATING BLASTOMYCOSIS.

By H. G. ADAMSON, M.D., F.R.C.P.

SPOROTRICHOSIS, now shown to be of common occurrence in America and in France, seems to be a rare disease in this country. For in spite of the fact that dermatologists have here been on the look-out for cases ever since De Beurmann and Gougerot excited interest in the disease by their first observations published in 1906, two examples only, or possibly three, have been discovered in Great Britain. The first native case was that recorded by Norman Walker of an agricultural labourer who lived in Cumberland. It was a case

of the type of gummatous lesions along the arm. The second example was a case of the disseminated ulcerating gummatous form in a woman who had never been out of London,* which I showed at a recent meeting of the Dermatological Section of the Royal Society of Medicine. The diagnosis of the case published by Ofenheim was doubtful. In the case published by myself in 1911 the patient had become infected in South America. The third of my

cases which I am now about to describe was also possibly of American origin, as the patient was in the United States when the first symptoms appeared. I publish it, therefore, not as an example of an additional native case, but because the lesions are of a somewhat unusual form, and very closely simulate those described and pictured by American observers as being characteristic of blastomycosis.

The patient was a man, aged 60 years, a publican. He was seen

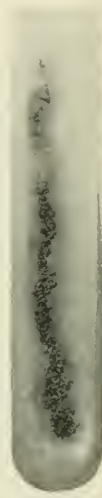
* Dr. de Beurmann, to whom a culture of this case was submitted, believes it to be an example of *Sporotrichum Gougeroti*, of which only one example has been observed in France.

by me in consultation with Dr. S. S. Burn, of Richmond, on November 27th, 1912. The *history* was as follows: Six months previously while in the United States an ulcer had appeared upon the right leg. This was followed by others upon the trunk and hands. The ulcers upon the leg and trunk had healed without treatment, but those upon the hands had increased in size. *The lesions*

FIG. 1.



FIG. 2.



Cultures from case of sporotrichosis simulating blastomycosis.

FIG. 1.—Earlier stage. The upper two thirds of culture retain their original grey-white colour. The lower third has become dark.

FIG. 2.—Whole culture. Dark-brown convoluted appearance well shown.

presented the following appearances: The back of the right hand was almost covered by an irregularly raised circular patch, the greater part of which consisted of closely packed vascular papilliform elevations. Sero-pus could be squeezed from between these papilliform elevations, and in parts they were hidden by crusts of dried secretion. In other parts there was evidence of healing in the form of irregular, smooth, pinkish, scar-like bands and streaks. The margin of the patch was dusky-red, raised, smooth, about one eighth

of an inch wide, and sloped gradually to the level of the normal skin around. In this margin there could be detected pin-head-sized abscesses. In all respects the lesion corresponded to the descriptions of those of blastomycosis. On the back of the left hand there was a similar but smaller lesion. There were no enlarged glands at the elbow nor evidence of lymphangitis along the arm.

A provisional diagnosis of blastomycosis was made, although no yeast-spores were to be found in the pus from the minute abscesses. Several of the pin-head-sized abscesses along the border of the lesion were punctured and the pus stroked upon sloped peptone-agar tubes—the only culture medium then available.

Cultures.—The tubes were kept at room temperature and uncapped. In the course of a few days colonies of *Staphylococcus epidermidis albus* appeared, and about twelve days after inoculation each colony became surrounded by a downy halo, while one or two downy tufts appeared between the colonies. Evidently this downy growth was not a late contamination, but had been inoculated with the pus. Sub-cultures were made upon glucose-peptone-agar, and in the course of a few days a downy white growth appeared. This then became convoluted at its central part, and darkened until it presented the typical appearances of *Sporotrichium Beauverii* (Figs. 1 and 2). The fructification was studied in growths made upon microscope slides which had been coated with a thin layer of glucose-peptone-agar—De Beauver's *technique des lames sèches*. The typical grape-like clusters of spores upon slender mycelium were found.

Treatment.—Iodide of potassium was prescribed when the diagnosis of blastomycosis was made on November 27th. The dose commenced with gr. xx three times daily, and was advanced to ʒss three times daily. On December 16th Dr. Burns wrote me that the whole ulcer had scarred over and that the infiltration was rapidly disappearing.

Remarks.—This type of papillomatous or vegetating sporotrichosis has been described by De Beauver, and he quotes a few cases which have been recorded by others. A photograph which he publishes in *Les Sporotrichoses*, p. 309,* of a case of "Kérion sporotrichosique" of Brisseau and Fulonis, of Nice, shows exactly the condition seen in my case. These ulcerating papillomatous lesions appear to result from

* *Les Sporotrichoses*. De Beauver and Gougerot. Librairie: Félix Alcan, Paris.

the breaking-down of a gummatous nodule and the formation of papilliform growths on the base of the ulcer thus produced.

Since writing this note I have sent a tube containing a culture to Dr. de Beurmann, and he has written in reply that the culture is without doubt *Sporotrichum Beurmani*, and that the verrucose form which I had described to him is not rare in France.

ROYAL SOCIETY OF MEDICINE.

DERMATOLOGICAL SECTION.

MEETING held on Thursday, January 16th, 1913, Sir MALCOLM MORRIS, K.C.V.O., President of the Section, in the Chair.

Dr. J. L. BUNCH showed a case of *Erythema iris* (? due to potassium iodide). The patient was a man, aged 31 years, the conductor of a tram, who some weeks ago came to hospital with some raised, firm, slightly indurated lesions on both knees and elbows. These lesions were of about the size of a pea, grouped in patches of five or six, pinkish or yellowish in colour, and in a few cases they contained fluid of a purulent character. There was no affection of the buccal mucous membrane, and no spots elsewhere. There was a history of the patient having taken some medicine, but the nature of this is unknown. The character of the lesions and their distribution gave rise to the suspicion that they might have been produced by potassium iodide. Under the administration of arsenic internally the lesions all cleared up. This was then discontinued and 5 gr. of potassium iodide given three times a day. After a few days almost precisely similar pea-sized, partly vesicular or pustular spots again appeared on the knees and elbows, but now accompanied by small white patches on the mucous membrane of the inner sides of the cheeks. Little variation showed itself in the character or distribution of the patches until about a week before the meeting, when raised circular lesions appeared on the anterior surfaces of the wrists, with a pinkish periphery, separated by a paler zone from a purplish centre, which was in some cases surmounted by a vesicle or pustule. These lesions were very numerous and spread some way up the forearms. They are present now, and in my opinion they present the typical appearances of

an Erythema iris eruption. As to how far they have been caused by the potassium iodide is perhaps uncertain. The mere stoppage of the arsenic internally may possibly account for the reappearance of the eruption on the knees and elbows (even if the administration of potassium iodide is a more probable explanation), but this eruption had neither the characters nor the distribution of Erythema iris, and it must not be forgotten that the co-existence of an iodide eruption with lesions of typical Erythema iris or any other variety of Erythema multiforme is not impossible. Cultivations of some of the pustules showed only the presence of *Staphylococcus albus*.

Dr. PRINGLE entirely agreed with the diagnosis of Erythema multiforme iris, and with the exhibitor's observation that the original distribution of the lesions on the elbows and knees was puzzling. In his experience iodide of potassium did much harm in such cases. He had given it a large trial about twenty years ago, when it was greatly advocated in France for Erythema multiforme, but had soon abandoned it.

Mr. C. C. CHOYCE, F.R.C.S., and Dr. H. MACCORMAC showed a case of *Granuloma inguinale tropicum*. The patient was a native of China, and, as far as can be gathered, the disease began in October, 1911, somewhere in the neighbourhood of the penis. From that position it has gradually spread backwards until the present state of affairs has been attained. In the left groin, extending along Ponpart's line almost to the anterior superior spine, there is a broad line of mixed granulomatous and scar tissue. There is evidence that the disease has been more active here, but has undergone a certain amount of healing. In the peri-anal region there is both granulomatous formation and ulceration, and from these ulcers there is a foul discharge. Around the coccyx the disease assumes a horse-shoe shape, being composed of large nodular masses with central ulceration. The peculiar pink colour of these lesions is in strong contrast to the normal pigmented skin. Besides the ulceration and granulomatous changes there is also a considerable degree of hardening or sclerosis. Wassermann's reaction has been tried, with negative results, on three occasions; no micro-organisms except such as would be found as contaminations have been isolated by cultural methods. A blood-count demonstrated the existence of some anaemia, together with an eosinophilia (5 per cent.). An injection of salvarsan had been tried without benefit. The general health appears to be little affected.

Microscopic sections demonstrate that the condition is neither tuberculosis, syphilis, nor malignant.

Dr. PRINGLE briefly referred to the case seen by him in 1889, which he believed to be the first observed in this country. His notes were incorporated in an article by Dr. Galloway.* Up to that time all recorded cases occurred in the West Indies, or in West Indians; but the disease is now known to be of very wide tropical distribution.

Dr. SEQUEIRA reminded the members of a case shown by him in which there were not only lesions of this type in the inguinal region but also a horse-shoe-shaped tumour at the angle of the mouth. The case was described with a coloured illustration in the *Proceedings*.† The infiltration cleared up entirely under the X-rays.

Dr. MACLEOD said that he had exhibited a case of *Granuloma tropicum* at the Dermatological Society of London, in which the disease was chiefly located in the gluteal fold and extended for a short distance into the rectum on the mucous membrane. After trying various forms of treatment a complete cure was obtained by exposure to the X-rays followed by scraping. An attempt to scrape the warty granulations before employing X-rays was unsuccessful, owing to their toughness. He considered that in situations where the disease could be satisfactorily exposed the X-rays alone could effect a cure. In this case the only organism which was found was a staphylococcus, and it was conceived possible that it might be the pathogenetic agent. No Leishman-Donovan bodies were found such as have been reported in one or two cases.

Mr. HAYWARD PINCH said that the last case of the kind which he saw in India was in the person of an Englishman—an occurrence which was very uncommon. It took a long time for the patient to get well, though the case was seen early. It was ultimately cured by scraping followed by zinc ionisation.

Mr. McDONAGH said that Wise had described spirochæte as being found in this condition, but was not certain as to whether they were the cause thereof. The absence of response to salvarsan was certainly against a protozoal origin. This supported Flu's observation, who considered that the disease was due to a capsulated intra-cellular diplobacillus not unlike the bacillus of rhinoscleroma. Flu's work had been confirmed by one or two other observers.

Dr. E. G. GRAHAM LITTLE showed a *case for diagnosis*. The patient was a fireman, and had been sent to St. Mary's Hospital for diagnosis by Sir John Collicie. The history was that exactly six weeks previously the eruption had begun at first on his back, and then quite quickly spread until, as at present, it covered the trunk, back and front, and was less thickly grouped but definitely existent on the groin, thighs, legs and upper arms. The lesions now consisted of pigmented macules, very numerous, and shaped much as the lesions are in Pityriasis rosea, but the colour was very much darker than the

* *Brit. Journ. Derm.*, 1897, ix, p. 133 *et seq.*

† *Proc. Roy. Soc. Med.*, Dermatological Section, 1908, i, pp. 57 and 92.

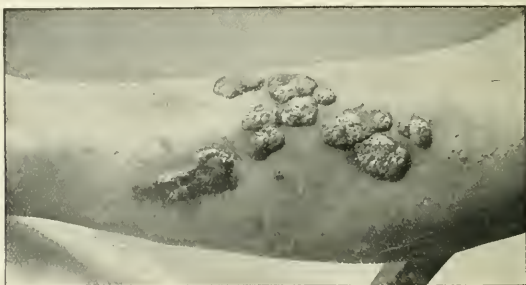
exhibitor had seen in Pityriasis rosea, being a walnut or light mahogany colour. There was no scaling or crinkling of the surface as was so characteristic in Pityriasis rosea. There was some general enlargement of glands—in axillæ, groin, and posterior cervical triangles. The patient had not had any chancre or other symptom of syphilis. He had been treated by Sir John Collic's assistant, on the assumption that the disease was psoriasis, with iron and arsenic. The pigmentation had apparently increased lately, so that some of the effect might be attributed to arsenic. Three Wassermann tests had been made, the report in the first two cases being "doubtful"; in the

third it was stated to be negative. A portion of the skin from one of the more deeply pigmented areas was examined histologically. There was no inflammatory infiltration of the corium or in the neighbourhood of the vessels; there was probably a slightly increased number of mast-cells in the superficial zones of the corium, but not enough to warrant a diagnosis of Urticaria pigmentosa. The man had complained in the earlier stages of the eruption of considerable itching, and the colour of the lesions had suggested the possibility of Urticaria pigmentosa. On January 27th, some nine weeks after the appearance of the eruption, the rash had not faded and the pigmentation remained practically unaltered.

DR. PRINGLE, DR. WHITFIELD, DR. SEQUEIRA, DR. MACLEOD, DR. PERNET and DR. ADAMSON all considered the case as one of fading Pityriasis rosea with a somewhat unusual degree of pigmentation.

Dr. E. G. GRAHAM LITTLE also showed a case of *Dermatitis artefacta*.

The patient was a spinster, aged 33 years, a schoolmistress at Bletchley, and the remarkable feature in the case was the strictly unilateral distribution. On the left leg and the left cheek there was a vesicular and excoriated surface with sharply defined borders; the greater part of the front of the leg and the whole of the left cheek were thus affected. There was no anaesthesia of the palate, as is so often present in these cases. The agent of production had not been identified, the patient having been seen only once. She had had previous lesions in the same position. No motive could be ascertained



Dr. Little's case of Lichen planus.

for the self-mutilation. An American observer had noted the curious frequency of the condition in spinster school-teachers. In the exhibitor's experience the face was seldom chosen for the production of the artificial dermatitis, however widely this might be present.

Dr. WHITFIELD said he detected a smell of acetic acid on the leg lesion. It was probable, therefore, that either strong acetic acid or more likely *Acetum cantharidis* had been applied.

Dr. PRINGLE said he had an interesting case of similar nature in the Middlesex Hospital at the present time. The patient was a girl, aged about 26 years, employed as a masseuse in a "beauty specialist's" place of business in Bond Street. She had been for several weeks in a private nursing-home when first seen, where she had been successful in producing crops of lesions apeing—by no means unsatisfactorily—*Dermatitis herpetiformis*. The affected areas were almost "universal" as far as the skin could be reached by either hand, but the face and neck had been left alone. The parts had become septic, the temperature

was high, and the patient had become really very ill. The nature of the case was immediately recognised on its admission to hospital, and the sepsis relieved by prolonged borie and starch baths. She produced a few vesicating lesions during the night on parts purposely left exposed, the agent employed being carbolic acid sent in from outside the hospital. The girl was silly and nenrotic; the palate was absolutely insensitive; her general cutaneous sensibility was intact, but there was universal loss of appreciation of pain. Unfortunately, her thermic sensibility had not been tested. After her imposture was exposed and the skin sepsis cured she got quite well.

Dr. F. PARKES WEBER suggested that the production of skin-lesions by this class of persons, by providing a kind of safety-valve to their feelings, sometimes made them temporarily more mentally normal in other ways, and possibly saved them from troublesome psychical disorders. Self-produced cutaneous lesions might in a kind of way take the place of attacks of hysterical vomiting, so-called "hysterical pseudo-appendicitis," and functional conditions simulating acute intestinal obstruction, for which laparotomy had occasionally been performed owing to mistaken diagnosis.

Dr. E. G. GRAHAM LITTLE showed a case of *hypertrophic Lichen planus*. The patient was a woman, aged about 45 years, in whom the tumours had been present for at least two years. She gave no history of generalised Lichen planus, and showed at the present time only very doubtful lesions of the flat type of Lichen planus on the front of the wrists and at the upper and inner part of the right knee. On the right leg, however, over the middle third, there was a remarkable efflorescence of tumours, raised $\frac{1}{2}$ in. above the skin, rounded and oblong in shape, and about the size of the distal phalanx of the thumb in an average man. The surface was granular and lobulated, the mass overhanging its base so as to give the appearance almost of a pedunculated tumour, but in reality constituting strictly sessile excrescences. They were bluish in colour and very itchy; the tumours numbered about twelve. There was only one elsewhere than on the right leg, and that was in the left popliteal space. There was no lesion in the mouth. The patient had not been taking drugs, and was otherwise in good health.

The PRESIDENT (Sir MALCOLM MORRIS, K.C.V.O.) said shaving off the lesions had been effectual in similar cases. He had known cases cured by X-rays. He had one case in which an enormous lesion, as large as an orange, was on the margin of the vagina, and that did very well with X-rays—four pastille doses.

Dr. J. H. SEQUEIRA showed a case of *Urticaria bullosa in an infant*. Urticaria of the common type, characterised by the development of extensive wheals, is rare in infancy, and there exists a difference of

opinion as to whether strophulus or papular urticaria is to be considered a true urticaria. In the case shown, wheals have been the predominant feature throughout, and, in addition, the formation of bullæ has been a constant phenomenon during the past two months.

The patient, a female infant, aged 8 months, the daughter of parents of Polish origin, was first seen at the London Hospital in September, 1912, when she had a red papular eruption all over the body. Under a simple soothing ointment this eruption cleared up. In November, 1912, the infant was again seen. The skin of the chest, abdomen and back was covered with wheals, and groups of flaccid bullæ, varying in size from a pea to a small nut, and containing a clear fluid, were scattered over the trunk. Many of the blebs ruptured and left raw surfaces which healed readily. From that time until January, 1913, the child has been seen several times a week and the condition has remained unchanged. Several times while under observation wheals have been observed to develop into blebs. Although there was no surface of healthy skin upon which factitious urticaria could be produced, the act of stroking or rubbing the affected area produced extensive whealing. The blood and also the serum from blebs were examined, but no excess of eosinophile cells was found.

There were three other children in the family quite healthy. The mother also appeared to be quite healthy, and had been taking no medicine which could have accounted for the condition. The infant had been brought up at the breast throughout. It appeared quite well in other respects. The motions were of normal appearance and there was no sickness. Small doses of hydrarg. cum cret. had been given and an emollient applied locally. The baby had at first been washed with curd soap, but more recently oatmeal had been used in the water.

The PRESIDENT said his experience of calcium lactate was that it was of no benefit in this condition. A very important point in bad cases of Dermatitis herpetiformis and old-standing pemphigus was that starvation seemed to cure it. He was in Edinburgh a few weeks ago and he saw, in Dr. Norman Walker's wards, a case of Dermatitis herpetiformis which had been of many years' standing. Every ordinary means of stopping it failed, and starvation was the only thing which influenced it, *i.e.* taking nothing but water. When he returned he told this experience to a patient who had had this disease for many years, whom he had

shown once before the Section, and she went without food for five days, with the result that the condition quieted down enormously. It was only in very bad cases that the patient could be expected to agree to this.

Dr. AGNES SAVILL said she sometimes saw cases cured by calcium lactate alone, but her custom was to give hydrarg. cum cret. first in order to disinfect the intestinal canal, for she had found the calcium did not act, in the majority of cases, until this prior clearance had been effected.

Dr. PRINGLE said the patient's skin was urticating under one's eyes. Some discussion having been raised by the President as to the value of calcium salts in similar conditions, Dr. Pringle said that he had never been able to convince himself of their possessing any therapeutic value for the relief of itching or for the prevention of urticarial conditions, although he had administered them in all the various ways advocated since their introduction into practice several years ago. The value of lactate of calcium as a hæmostatic previous to operations was, however, easily demonstrated. He agreed with Dr. Savill that eruptions in children probably referable to intestinal toxæmias, were best treated by keeping the bowel thoroughly cleared out with mercury and chalk or other mercurials.

Dr. DORE remarked on the rarity of ordinary urticaria in infants; there must be some difference in the causation or in the texture of the skin of infants compared with that of adults, for in the former one found Lichen urticatus and in adults ordinary urticaria.

Dr. WHITFIELD considered that the condition at the present time was urticaria. Factitious urticaria was present in a marked degree.

Dr. F. PARKES WEBER showed a case of *Erythema induratum with tuberculosis*. The patient, a young woman, aged 30 years, single, has a mass of enlarged lymphatic glands on the left side of the neck and typical "Erythema induratum" (Bazin's disease) on both legs. In regard to her general condition there is nothing special to note beyond slight anæmia and a tendency to chilblains on the fingers. The heart, lungs and abdominal organs seem healthy, and the urine is free from albumen and sugar. The Erythema induratum, which is most advanced on the left leg, consists of patches of brawny swelling, with a more or less livid appearance, chiefly at the back, over the lower portion of the calf muscles. There has been ulceration, but there is none at present. The history of glandular enlargement on the left side of the neck dates from the age of ten, but the swelling seems soon to have subsided and not to have returned till about the age of nineteen or twenty. At the age of twenty-two the glands were removed by operation, but at the age of twenty-six enlarged glands were again noticed, and an abscess in connection with them was opened. There was further enlargement one and a quarter years ago, and the patient underwent a long course of tuberculin treatment

under Dr. A. White Robertson in 1912, from January to the end of September. In November, 1912, however, there was again much swelling. At present the glands on the left side of the neck might suggest the diagnosis of Hodgkin's disease (lymphadenoma), but against this is the long history without enlargement of other superficial lymphatic glands or of the spleen or liver. Moreover, the presence of the Erythema induratum is probably a point in favour of the tuberculous origin of the glandular enlargement. In regard to the history of the Erythema induratum, it may be stated that it was present, to a slight extent, in both legs at the age of thirteen. At the age of sixteen both legs were worse, and there were broken-down places—deep ulcers, like "holes in her legs." Since then the state of her legs has varied, but on the whole they have improved. The tuberculin treatment in 1912 seemed to make no obvious difference to them.

Dr. PARKES WEBER asked members whether they knew if any of the cases formerly diagnosed as Erythema induratum or Bazin's disease had really been local sporotrichosis infections.

Dr. WHITE ROBERTSON said he used for this patient first tuberculin P.T.O. followed by P.T., then worked to Koch's tuberculin to the full cubic centimetre dose. The swelling of the original enlarged gland had been $3\frac{1}{2}$ in. long, but there had been no suppuration. Under tuberculin it steadily went down to $1\frac{1}{8}$ in. Most of the present glandular swellings had come up since he last saw her on October 6th, and he could not accept them as tuberculous in view of the recent high dosage without reaction.

Dr. WHITEFELD said that in his experience Erythema induratum reacted with old tuberculin, *i.e.* it tumefied, and, if not already red, became red and swollen, and after a single dose frequently got much better. Like all tubercular lesions, this condition was very variable in its reaction to tuberculin. He had a case in which a nodule was already liquefied, and yet it disappeared when the patient was treated with tuberculin. Previously to using the tuberculin the nodules had always ulcerated.

Dr. PARKES WEBER remarked that the result of the tuberculin treatment in the present case seemed unsatisfactory. Though the glands had subsided for a time they had soon enlarged again with a rush. Possibly some slight septic infection in the fauces had started the flaring-up again of the lymphatic glands in the neck.

NOTICE.

CONGRESS OF THE GERMAN DERMATOLOGICAL SOCIETY.

THE next Congress of the *German Dermatological Society* takes place in Vienna on September 19th and 20th, 1913, immediately before the *Naturforscherversammlung*. Communications which have been accepted, but which cannot be considered at this Congress, may be received at the sittings of the Section of the *Naturforscherversammlung*. Enquiries should be directed to Prof. Ehrmann, Wien, IX, Kolingasse 9, or to Geheimrat Neisser, Breslau, 16, Fürstenstrasse 112.

CURRENT LITERATURE.

CRUDE COAL-TAR IN DERMATOLOGY. STEPHANIE RYGIER and ERNST MÜLLER. (*Archiv f. Derm. u. Syph.*, October, 1912.)

THIS paper deals concisely and clearly with the author's experiences in the treatment of one hundred cases of skin-diseases with coal-tar. After emphasising, by means of several analytical tables, the great variation in the chemical composition of the tars in dermatological use, they conclude that the results obtained are in the main due, not to any single constituent, as *e.g.* sulphur, carbolic acid or naphthalin, but to the combined effect of the many, and that their mode of action must be regarded as protective and astringent rather than antiseptic or specific. In tar we have, then, an antipruritic, exsiccating, astringent, and infiltration-preventing medium. The diseases treated were chronic eczema, 64 cases; acute eczema, 13 cases; Psoriasis vulgaris, 9 cases; Dermatitis lichenoides (Vidal), 3 cases; prurigo (Hebra), 2 cases; and a case each of pemphigus, Dermatitis herpetiformis (Dühring), Lichen ruber planus, and Pityriasis rosea.

By far the best results were obtained in the cases of chronic eczema, Dermatitis lichen chronica, and prurigo (Hebra), results which are not surprising considering the underlying pathology. According to the authors there is no treatment in dermatological therapeutics which can vie with it for rapidity and permanence of result in such cases. In their experience success or failure depends on choosing the right moment for its application. Sepsis must be got rid of, as staphylococci grow with great celerity and ease under its protecting coat, and inflammatory spreading stages also should first be controlled by other remedies if exacerbations and recurrences are to be avoided. Some persons show an idiosyncrasy which prevents its use in their cases; the symptoms are those of carbolic acid poisoning, *i.e.* headache, nausea, diarrhoea, conjunctivitis, and carboloria, but in the main toxic sequelæ are exceedingly rare, and easily avoided if the urine be kept under observation.

Method of use.—The authors regard tar more as a link in the chain of dermatological therapeutic agents than as a panacea for all skin-diseases. The procedure they advise is as follows:

- (1) Moist compresses or applications.
- (2) Pastes or simple ointments.
- (3) Ichthyol or tumenol pastes or ointments.
- (4) Coal tar, which contains tumenol and similar substances, on a small experimental patch of the disease.
- (5) General application to the whole area.

This application is made in a thin layer with a brush. The drying is hurried on by powder dustings in ward cases, by gauze bandages in out-patients. The usual procedure is to leave the dressing on for forty-eight hours where it agrees, and then to remove it with ichthyol zinc paste, or lead vaseline. After three to four days a second application may be made, and then a third or fourth as may be necessary, and eventually it will be found that a skin which previously would not have tolerated the application of a wood tar will now be benefited by its exhibition as a final measure.

H. C. S.

SPIROCHÆTA PALLIDA IN CULTURE. SOWADE. (*Archiv f. Derm. u. Syph.*, October, 1912.)

THE author relates in detail the results of his culture experiments, and divides his paper into three headings: (1) Impure growths; (2) pure growths; (3) inoculation of animals from cultures.

It is a comparatively simple matter to obtain an impure or mixed culture from a primary chancre or a condyloma. For general purposes, horse-serum, heated on three consecutive days for two hours on the water-bath to 58° C., and on the last occasion to a temperature just sufficient to produce coagulation, is the best medium.

Small pieces of the excised tissue are introduced by gentle pressure below the surface to ensure a more or less anaërobic environment, and the culture-tube is then placed in the incubator at 37° C.

In from three to five days a dirty greyish discoloration of the inoculation track can be observed, a putrefactive smell develops, and the medium in the immediate vicinity becomes liquefied.

The liquefaction is due to the contamination of the accompanying putrefactive organisms, which are very difficult to eliminate, and which in the course of about ten days produce complete fluidity of the whole medium. Subcultures can very easily be made with a Pravaz syringe.

In his second chapter Sowade describes the method which, in his hands, has successfully produced pure cultures of the spirochæte. About the fourth day he evacuates the fluid in the track, and carefully fills it with 70 per cent. alcohol, which he allows to act for not more than ten minutes. If the procedure has been successful the medium will not undergo further liquefaction, he has killed the cocci and bacilli in the track and for some distance around it.

The spirochæte in the immediate neighbourhood are also destroyed, but owing to their superior motility many in the periphery are not reached, and continue to grow towards the sides of the culture-tube. These are recovered by careful fracture of the glass under aseptic precautions. Thin sections of the medium with a sterile knife are subcultured in a similar manner into horse-serum, and if the process has been successful no liquefaction, only a faint greyish discoloration

of the track (seen best by artificial light), will be observed after incubation at 37° C. for eight to ten days.

Spirochaetae reared in this manner do not appear to be nearly as virile as those in a mixed culture, nor are they so abundant. His animal experiments with pure cultures have not yet reached the publishing stage.

Some points emphasised in this contribution are:

(1) Spirochaetae from a primary chancre or a condyloma will live in this medium for from three to four and a half months, and will submit to very prolonged subculture.

(2) Gummata will in nearly every case yield a positive result (*e.g.* in one case a history of forty years' previous infection was given). The spirochaetae from gummata do not as a rule survive more than three subcultures, but inoculation of the first and second generations are usually pathogenic to rabbits.

(3) In the author's opinion, transmutation from the refringens to the pallida type never occurs.

H. C. S.

THE DRY TREATMENT OF CERTAIN DERMATOSES. (CHARLES J. WHITE. (*Journ. of Cut. Dis.*, December, 1912, p. 705).)

THE diseases referred to in this paper consist of three cases of pemphigus and six cases of Dermatitis exfoliativa. In the pemphigus cases one died, probably from some intercurrent cause, and two were relieved or cured, while in the cases of Dermatitis exfoliativa, though they were all severe cases, relief or cure was obtained in them all.

The method is as follows: During the acute stages of the disease the patient is put to bed and kept there until all, or practically all, moist surfaces have ceased to appear. If there are many lesions upon the dorsal surface of the body an air mattress is employed and kept well inflated. All natural functions are carried on in the reclining position, and the patient eats, sleeps, defaecates, urinates and rests in this reclining position. It is well to insist on this precaution, for it has seemed at times that a recrudescence of the disease has followed any relaxation of this rule.

The food is restricted to "soft solids" and the abundant ingestion of water: the air of the apartment is kept as fresh as possible: bathing is not allowed: sleep is encouraged: medicines are administered only when special general symptoms demand them, and the pith of the whole system lies in the external use of borated talc, a bland, antiseptic, absorbent powder pushed to its extreme limit. The application of the powder is made through a sifter, and every lesion on the body is dusted with it whenever any moisture appears. If the scalp be affected the hair should be cut short. The patient should lie naked in bed and the sheet and blankets should be supported on a frame, so that nothing should touch his body but the powder, which should lie in sufficient depth below, around and above him to cause immediate absorption of any supervening moisture. No two surfaces should touch each other: the arms should be kept away from the body, the fingers should be abducted, the legs should be stretched apart, the penis should be separated from the scrotum and the scrotum from the thighs by much powder. Such a procedure demands a room with a bare floor and walls, and without unnecessary furniture. If the air be dry the patient suffers from the abundant

dust, but the aural, nasal, oral and optic passages can be made comfortable by appropriate plugs of absorbent cotton, demulcent gargles and pastilles, and by eye-washes.

As a rule the moist places remain clear and simply dry up, but occasionally a great crust heaps up and pus collects beneath it. This overlying mantle must be removed at once and the drying process instituted *in situ*. If the purulent process develops a second time it is wise to apply an antiseptic drying wash (and black wash has proved satisfactory) until the exuberant pus has been conquered. A return is then made to the powder treatment. By this means it is believed that the bacterial growth is inhibited which so seriously complicates the affections, and comparative comfort is afforded to the patient instead of distressing him by tearing off dressings or bathing the sores when they have become stuck to the bandages.

J. M. H. M.

REVIEWS.

THE CARE OF THE SKIN IN HEALTH.*

IN the preface, the author says that thirty-five years spent in the study of diseases of the skin have convinced him that considerable ignorance prevails as to the proper care of the skin in health. It is too readily assumed that everyone can intuitively manage his or her skin, but every dermatologist knows how many cases of skin-disease are in part caused, or at least aggravated, by mismanagement of this important organ. No pretence is made that the advice given in this little book will enable everybody to avoid all disorders of the skin, but the hints contained in it may be, and no doubt will be, productive of good. It is quite practical, whether the question is one of the causes and effects of chills, or the time and manner in which a cold bath should be taken. A considerable amount of space is devoted to the subject of sour milk, its preparation, and the advantages to be obtained from its use. The regular employment of such milk is stated by the writer to initiate and maintain a feeling of well-being combined with the conservation of physical elasticity and mental keenness. A contrast is drawn with the dire effects produced by sweets in the form of confectionery and chocolates, especially chocolate creams. We can heartily recommend this little book to the numerous individuals (not only ladies) who are ignorant of the simple rules which are so necessary to keep the skin healthy.

J. L. B.

ENTRETIENS DERMATOLOGIQUES À L'ÉCOLE LAILLER (HÔPITAL ST. LOUIS).†

DR. SABOURAUD's contributions to the literature of dermatology are always welcome, and we hasten to commend to our readers these dermatological con-

* *The Care of the Skin in Health*. By W. ALLAN JAMIESON. London: Henry Frowde, Hodder and Stoughton, 1912. Pp. 109. Price 2s. 6d. net.

† *Entretiens Dermatologiques à l'École Lailler (Hôpital St. Louis)*. By Dr. R. SABOURAUD. Pp. 512, with 49 figures in the text. Paris: Octave Doin et Fils. Price 9 francs.

versations, which comprise the author's clinical teaching week by week in the Ecole Lailler at the St. Louis. The lectures have appeared from time to time in the *Clinique*, and their publication in book form will be of great value, for the author, whom we have long admired as a scientific investigator, is an admirable clinical teacher. The book does not cover the whole of the subject of dermatology, but specially touches on questions which are ill-understood because they are often indifferently discussed. Rare conditions are omitted, the lectures being specially directed to the student.

The first section is devoted to the principal affections of the seborrhœic group: Pityriasis, acne, seborrhœa, and baldness.

The second section deals with the alopecias.

The third treats of erythrasma. Eczema marginatum of the groins and feet, etc.

The fourth section comprises an account of the pyodermites: folliculitis, boils, sycosis and the impetigos.

Section V deals with eczema and the prurigos.

These subjects are presented in a most instructive conversational manner, and are illustrated by characteristic cases and by laboratory observations where they have a practical bearing.

The last two sections of the *Entretiens* are devoted to the therapeutics of the skin, and in them we find much of value to the practitioner. In the chapter on the minor surgery of the integument we have a detailed account of the use of the galvano-cautery, the surgery of sebaceous cysts of the scalp, on cauterisation with nitrate of silver and zinc, and on the use of carbon dioxide snow.

We congratulate the author on the appearance of this book, which we feel sure will have an instant success as it conveys in a delightfully easy style so much practical information.

J. H. SEQUEIRA.

A TEXT-BOOK ON SKIN-DISEASES.*

THIS is the fourth edition of Dr. Jessner's well-known book on skin-diseases, and this edition is characterised by the appearance of the book in two volumes. The first volume, which is dated 1913, has already reached us, and is distinguished by the fact that it finishes in the middle of a sentence. We hope that our curiosity as to the termination of this sentence will be soon appeased, and that we shall soon see the appearance of volume ii, which is to contain a description of all the venereal diseases, gonorrhœa, Ulcus molle, etc., in addition to cutaneous syphilis. The book is evidently meant for the busy practitioner and is quite practical. The first volume contains a new chapter on dermatological surgery very sketchily written, and is further adorned by six coloured histological diagrams and twenty-seven coloured reproductions of casts of skin-diseases. We must compliment the publishers on these coloured pictures, and they undoubtedly add to the attractiveness of the book. The volume should have a large circulation.

J. L. B.

* *Lehrbuch der Haut- und Geschlechtsleiden.* Erster Band. Von Dr. S. Jessner. Würzburg: Curt Kabitzsch, 1913. Pp. 96. Price 9 marks 20 pfennige.

SMALLPOX AND ITS DIFFUSION.*

IN this little work the author records his experience at the Eastern Hospitals, London, which he believes proves the impossibility of the distal aërial dissemination of smallpox.

UROLOGISCHER JAHRESBERICHT.†

WE have received for review a copy of this excellent publication, dermatology and urology being linked together in Germany as twin specialities. We know no better German year-book than this, and it grows better and more complete year by year.

The arrangement of subject and indexing of papers is most practical, and the short summaries of papers leave nothing to be desired. We can heartily recommend it to those interested in urology as well worth the humble guinea which is the price of the publication. The print is clear and the paper of good quality.

F. S. K.

BOOKS RECEIVED.

E. Merck's Annual Report of Recent Advances in Pharmaceutical Chemistry and Therapeutics, vol. xxv. Published by E. MERCK, Chemical Works, Darmstadt; London Office: 16, Jewry Street, E.C.

Lehrbuch (Früher Kompendium) Der Haut und Geschlechtsleider, 1 Band. Lieferung 1, 2, 3. "Hautleiden und Kosmetik." Von Sanitätsrat Dr. S. JESSNER. Würzburg: Verlag von CURT KABITZSCH (Brosch), 1913. Price 9 m. 20 pfen.

Bulletin of the Manila Medical Society, September and November, 1912. Editor. W. E. MUSGRAVE. Published by the Organised Medical Profession in Manila, Philippine Islands. Annual Subscription \$1.00; single copy .10.

Malattie Veneree, vol. i, Parte 1. Prof. v. D'AMATO, Docente nella R. Università di Roma. III Edizione, illustrata. Roma: SALVATORI and DOSSENA. Prezzo. Li. 15.00.

Small-pox and its Diffusion. By ALEXANDER COLLIE, M.D. Aberd. Bristol: JOHN WRIGHT & SONS, LTD. London: SIMPKIN, MARSHALL, HAMILTON. KENT & CO., LTD. Price 2s. net. Pp. 58.

Diseases of the Throat, Nose and Ear. By W. G. PORTER, M.B., B.Sc., F.R.C.S. Edin. With 77 illustrations, 44 of which are in colours. Bristol: JOHN WRIGHT & SONS, LTD. London: SIMPKIN, MARSHALL, HAMILTON. KENT & CO., LTD., 1912. Price 7s. 6d. net. Pp. 275.

Entretiens Dermatologiques. Pp. 512. A L'École Lailler (Hôpital Saint-Louis). Par le Dr. R. SABOURAUD, Chef du Laboratoire Municipal de la Ville de Paris, à l'Hôpital de Saint-Louis. Avec 49 figures dans le texte. Paris: OCTAVE DOIN ET FILS, Éditeurs, 8, Place de l'Odéon 8, 1913. Prix 9 fr.

* *Smallpox and its Diffusion*. By ALEXANDER COLLIE, M.D. Aberd. Bristol: John Wright & Sons, Ltd. Price 2s. nett.

† *Urologischer Jahresbericht*. Redigiert von PROF. DR. A. KOLLMAN UND DR. S. JACOBY. (Literatur, 1911. Leipzig, 1912. Verlag von Dr. Werner Klinkhardt.) Liebigstrasse 2, Preis, Mark 21.

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CORRESPONDENCE.

To the Editor of the BRITISH JOURNAL OF DERMATOLOGY.

DEAR SIR,—In the December, 1912, number of the *British Journal of Dermatology*, on page 422, a report is published of a case of *Acne agminata* of Crocker, presented by Dr. MacCormac before the Dermatological Section of the Royal Society of Medicine.

Dr. MacCormac showed a section "exhibiting typical giant-cells, epithelioid cells, and other structures of tuberculosis." In the discussion that followed the presentation of the case, Dr. Pringle agreed with Dr. MacCormac's diagnosis, and thought his microscopical sections quite convincing as to the tuberculous nature of the disease.

With respectful deference to the value of Dr. Pringle's opinion in matters dermatological, I cannot agree with the views enunciated by him. I should regard as well taken the caution expressed by Dr. Whitfield, that "one should be careful about making a diagnosis of tuberculosis even where there was the most typical tubercular architecture."

In 1908 I read before the American Dermatological Association a paper entitled "The Study of Acnitis, with Report of an Extensive Case"; this was later published in the *Journal of Cutaneous Diseases* of January, 1909.

This case was a classic one of *Acne agminata*, the patient in the beginning presenting so remarkable a resemblance to the photograph published in Crocker's *Diseases of the Skin* as to appear to be almost a copy thereof.

The case interested me greatly, and I made a very careful study of the patient with the particular object of determining whether the disease was tuberculous in nature.

A number of lesions were excised, and sections cut and stained with great care. The sections showed abundant epithelioid and giant-cells, and presented the picture which we have been accustomed to regard as typical of tuberculosis. A patient examination of two hundred sections failed to reveal the presence of tubercle bacilli. Fragments of growths were inoculated into guinea-pigs with entirely negative results. (Dr. Douglas Heath seems to have had a similar experience.) The Calmette ocular tuberculin test, as well as several subcutaneous injections, failed to elicit a reaction.

After such a study I felt most strongly that the disease in my patient was not tuberculosis. The eruption lasted months, and disappeared, I believe, spontaneously. I saw the patient several years later, at which time he showed numerous pocked scars, but he had had no relapses whatsoever, and appeared entirely well.

I was likewise interested to read Dr. Pernet's statement in his discussion of Dr. MacCormac's case, to the effect that he had found the "sweat-glands disorganised by leucocytic infiltration" in a case of his own. A similar involvement of the sweat-glands was noted and described in the case reported by me.

The affection variously designated *Acne agminata*, *acnitis*, etc., runs a relatively acute course, and in this respect is quite different from the papulo-necrotic tuberculide (folliculitis). Another distinctive feature is the development of small abscesses beginning in the hypoderm and gradually making their way to the surface.

I believe that this dermatosis is a disease *sui generis*, and aetiologically unrelated to tuberculosis.

I beg to remain,

Very truly yours,

January 7th, 1913.

JAY FRANK SCHAMBERG.

THE BRITISH JOURNAL OF DERMATOLOGY. MARCH, 1913.

CHRONIC RAYNAUD'S SYMPTOMS, PROBABLY ON A
SYPHILITIC BASIS, ASSOCIATED WITH LIVEDO
RETICULATA. REMARKS ON LIVEDO RETICULATA
(LIVEDO ANNULARIS, LIVEDO FIGURATA, OR CUTIS
MARMORATA).

By F. PARKES WEBER, M.D., F.R.C.P.,

Physician to the German Hospital.

THE patient,* E. P—, is a married woman, aged 54 years, of medium height and weight, who has been subject to Raynaud's symptoms (of the "local asphyxia" type) during cold weather, chiefly in the left foot and left hand for the last fourteen years. On one or two occasions very slight gangrene occurred at the tips of some of the toes of the left foot. The last bad attack was about eight years ago. The hands have always been less affected than the feet. Cold always increases the symptoms, but she cannot stand exposure to artificial heat either. In explaining the way in which artificial heat affects her she describes occasional spontaneous attacks of heat and flushing, rising up towards the head, and accompanied by sweating, the face and ears becoming red. She has been subject to these "flushings" since the age of forty years, but they became more troublesome after the menopause, which occurred at the age of forty-nine years. Warming herself in front of a fire tends to bring on the "flushings," which are often followed by a slight feeling of coldness. No history of hæma-

* The patient was shown at the Dermatological Section of the Royal Society of Medicine on February 20th, 1913.

turia. She has had right-sided otorrhœa from chronic middle-ear disease more or less continuously since infancy. At the age of nineteen years she was laid up for six months with a severe attack of rheumatic fever, accompanied by heart trouble. She has been an out-patient at the Western Ophthalmic Hospital for eye trouble, and I am much indebted to Dr. Rayner Batten, under whose care she was, for information about her. Her sight began to fail in December, 1909.

Dr. Batten says that in 1910 he found the right eye myopic, whilst the left eye showed numerous retinal hæmorrhages and irregular beading of retinal vessels. After December, 1909, the patient became subject to recurrent attacks of temporary amblyopia, or even complete amaurosis, chiefly in the left eye, lasting only a few minutes, and sometimes accompanied by a little pain at the back of the eye. She has not had any ocular attacks of this kind recently, but they continued until about six months ago, at which time she almost completely lost the sight of her left eye.

There is no history of syphilis, but she says she has had nine miscarriages, the last when she was about thirty-nine years old. She has had no living children.

Present condition.—The hands are very red and tend to become cyanosed, but not nearly so much so as the toes, which almost always look bluish, especially the fourth toe of the left foot, from the tip of which one can still see that there has been slight loss of substance. The blotchy mottling of the skin, or "Livedo reticulata" ("Livedo annularis," "Livedo figurata" or "Cutis marmorata"), is very distinct over the whole of the patient's back, but is more striking over the extensor surfaces of the upper extremities (see Fig. 1), especially on the upper arms near the elbows and on the forearms near the wrists. In the lower extremities it is well marked on the front of the thighs near the knees (see Fig. 2), and on the front of the trunk it is most noticeable about the waist. The mottling can be made to disappear temporarily by rubbing the skin in a warm room. It becomes very much less marked in warm summer weather. The superficial cutaneous hyperæmia which follows venous constriction in the upper extremities (as in the process of ascertaining the brachial blood-pressure) is much greater than in ordinary persons. The white mark left by digital pressure on the mottled skin does not disappear in the extremely rapid way described by Ehrmann as characteristic

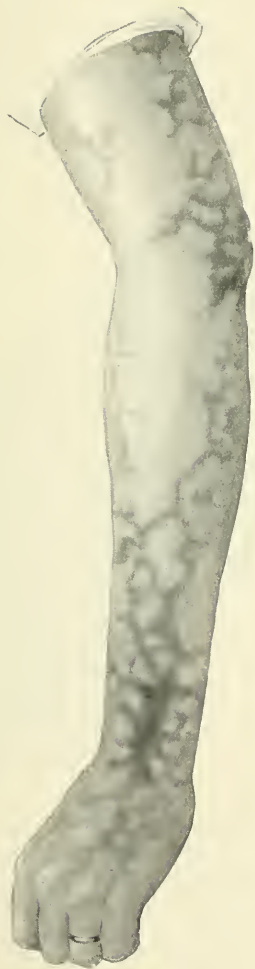


FIG. 1.

ILLUSTRATING DR PARKES WEBER'S ARTICLE, CHRONIC RAYNAUD'S SYMPTOMS.



for his cases of livedo of syphilitic origin.* There is no factitious urticaria to be elicited.

Examination of the patient's heart shows that the apex-beat is in the fifth intercostal space, in the nipple line; the impulse is very

FIG. 2.



forceible; the first sound at the apex is loud and "thumping," and preceded by a typical presystolic murmur of mitral obstruction. The lungs and abdominal viscera show nothing abnormal to ordinary examination. The liver and spleen are not enlarged. There is no fever. Pulse, 80 to 88 per minute; respirations, 22 to 24 per minute. The brachial systolic blood-pressure is very high; in both arms it

* See S. Ehrmann, "Ein neues Gefässsymptom bei Lues," *Wien. med. Wochenschr.*, 1907, lvii, p. 777.

measures 240 mm. Hg. The urine (daily quantity about normal) is of low specific gravity (1010), and contains a little albumen; it is clear, pale, slightly acid, and free from sugar, tube-casts, blood- and pus-cells. Blood-examination (February 17th, 1913): hæmoglobin, 70 per cent.; red cells, 5,160,000, and white cells, 9800 to the c.mm. of

blood. The microscopical examination of blood-films and the differential count of the white corpuscles shows nothing abnormal. The blood-serum (February 10th, 1913) gives a negative Wassermann's reaction for syphilis. The knee-jerks are active; the plantar reflexes are of flexor type; the hand-grasp is good on both sides; and sensation is normal. At present the right eye shows ophthalmoscopic changes connected with myopia, and with a suitable glass the vision is $\frac{6}{18}$; the pupil reacts normally to light. In the left eye there has

been hæmorrhage into the vitreous; and vision is reduced to mere perception of light.

The case is interesting from various points of view. In my opinion both the Raynaud's symptoms and the livedo may be regarded as having developed long ago, probably "on a syphilitic basis," although Wassermann's reaction for syphilis is now negative. The congestive influence of the mitral stenosis on the circulation doubtless favours both the livedo and the Raynaud's phenomena. A certain amount of arterio-sclerosis and chronic interstitial nephritis are almost certainly present, and are possibly also connected with old syphilis.

The early symptoms in the left eye, especially the attacks of temporary amblyopia, were probably in part due to retinal angiospasm, and allied to the Raynaud's phenomena, which were likewise best marked on the left side, notably in the left foot.

In the case of a man, aged 59 years, with Raynaud's phenomena, observed by Raynaud himself,* partial loss of vision followed the attacks of local asphyxia in the extremities. During such attacks of lividity in the extremities, when vision was at its best, the branches of the retinal artery showed partial constrictions. L. E. Stevenson† described the case of a woman, aged 25 years, with Raynaud's disease leading to gangrene of the toes. She suffered likewise from recurrent attacks of temporary complete or partial loss of vision, which Stevenson supposed to be due to spasm of retinal arteries. G. H. Fox‡ narrated two cases of Raynaud's disease, in both of which sudden, paroxysmal impairment of vision was a feature. G. A. Friedman§ published the case of a young woman, aged 23 years, with Raynaud's phenomena, in whom ophthalmoscopic examination showed marked contraction of the small arteries of the fundus oculi when the asphyxia of the extremities was most pronounced. Weiss|| has recently observed the case of a man, aged 54 years, who is occasionally subject to angiospastic attacks in the left hand. The most interesting feature of the case is the occurrence of transitory attacks of amaurosis, during which angiospastic phenomena have

* Raynaud, *Arch. Gén. de Méd.* Paris, 1874, vol. i, p. 8.

† Stevenson, *Lancet*, London, November 1st, 1890, p. 917.

‡ Fox, *Journ. Cut. Dis.*, New York, 1907, vol. 25, p. 336.

§ Friedman, *Amer. Journ. Med. Sci.*, Philadelphia, 1910, vol. cxxxix, p. 238.

|| Weiss, Communication to the Thirty-eighth Congress of the Ophthalmological Society, Heidelberg, *Münch. med. Woch.*, 1912, lix, p. 2074.

been watched, by ophthalmoscopic examination, in the right eye. The retinal arteries, and then the veins, were seen to empty themselves, so that the vessels came to look like yellowish-white threads. After half-an-hour the vessels began to refill, at first the small cilio-retinal vessels, then the veins, and then gradually the larger arteries. At the height of the attack there was amaurosis, and the central scotoma remained for half an hour after the ophthalmoscopic picture had become normal again. Several cases of temporary angiospastic amaurosis have been recorded in which the retinal angiospasm was apparently not known to be associated with Raynaud's symptoms in the extremities; in some of them angiospastic phenomena in the retinal arteries were observed by ophthalmoscopic examination. Hans Curschmann* narrated the case of a woman, aged 43 years, who suffered from attacks of angina pectoris, and had temporary right-sided amaurosis, probably due to retinal angiospasm. It must be remembered, however, that some attacks of transient amblyopia in patients subject to angiospastic phenomena in the extremities may be due to temporary circulatory conditions in the brain and not to peripheral intra-ocular causes.† With these cases may perhaps be compared that of a woman, aged 51 years, suffering from well-marked Raynaud's phenomena in the hands and also from vaso-motor aural (labyrinthine) disturbances.‡ One might likewise here call to mind that ocular attacks of a different nature to those already mentioned may occur in subjects of Raynaud's phenomena. Thus, M. Weiss,§ of Prag, recorded a case characterised by intermittent Raynaud's manifestations, and attacks of certain ocular symptoms, which he referred to the cervical sympathetic nerve, and which alternated with some of the vaso-motor attacks in the extremities.

In regard to the livedo in the present case I would again mention that the mottled skin does not react in the exact way described by Ehrmann in his cases of syphilitic livedo or "*Livedo racemosa*."|| Yet I suspect that the differences are somewhat arbitrary (chiefly a

* Curschmann, *Deut. med. Woch.*, 1906, xxxii. p. 1527, Case 3.

† Cf. Curschmann, *loc. cit.*, Case 2.

‡ H. J. Davis, *Proc. Roy. Soc. Med.*, Otological Section, 1912, v. p. 156.

§ M. Weiss, "*Ueber symmetrische Gangrän*," *Wien. Klinik*, 1882, viii. p. 347.

|| I think it is better to use the term "*Livedo racemosa*" as merely synonymous with "*Livedo figurata*," "*Livedo annularis*," and "*Livedo reticulata*."

matter of degree), and that really the livedo in Ehrmann's cases* is allied both to the Livedo reticulata in the present case, and to the remarkable Livedo reticulata occasionally met with in young persons on the extensor surfaces of the upper extremities (especially of the forearms, near the wrists) and on the thighs (near the knees), probably of congenital or developmental origin. The localisation is important from a diagnostic point of view. Thus, in a young woman, if cervical ribs are present, patches of Livedo reticulata on the forearms may be attributed to the presence of the cervical ribs, but if similar patches of reticular livedo are found near the knees, it becomes very unlikely that those on the forearms are caused by the cervical ribs. The localisation alone is sufficient to distinguish the reticular livedo in the cases to which I have alluded from the reticular "*Erythema ab igne*" (*Erythema figuratum ab igne*) and pigmentation over the shins, due to sitting in front of a fire, and from the similar reticular "*Erythema à calore*" and pigmentation due to the prolonged or habitual application of hot fomentations or india-rubber hot-water bottles (on account of pain, etc.), for instance, to the back or abdomen.

In this connection it should also be remembered that chronic venous obstruction of any kind may favour or cause the appearance of a local Livedo reticulata. Thus, heart disease (especially mitral stenosis), with imperfect compensation, may favour the development of wide-spread Livedo reticulata (this subject I have discussed elsewhere), and chronic obstruction, from any cause, in the great veins leading from the upper extremities, may be associated with reticular livedo and reticular pigmentation in the forearms.

Livedo reticulata, which sometimes very much resembles post-mortem mottling in appearance, though a good deal has been written about it, is nevertheless not generally well known. It varies greatly in degree and in extent of distribution. It may be localised so as to form patches (generally symmetrical patches) on the backs of the forearms, about the knees, etc., or it may be wide-spread, involving not only the extremities, but also the whole of the back and portions of the front of the trunk. Thus, it may be almost universal in distribution, though in such cases the different parts are not affected

* Ehrmann, *loc. cit.* See also Karl Schmidt, "Zur Kenntnis des Ehrmannschen Luesphänomens," *Arch. f. Derm. u. Syph.*, Vienna, 1912, vol. cxiv, p. 191.

to the same degree, the colour of the livedo, whether red or bluish, being much more marked in some parts of the body than in others. I suspect that various forms of Livedo reticulata and allied cases have been described under many names,* including "purpura annularis telangiectodes" ("telangiectatic annular purpura"), and that possibly some other cases described under the latter name may really have been examples of Hutchinson's "infective angioma" ("nævus-lupus," "serpiginous nævus").

ROYAL SOCIETY OF MEDICINE.

DERMATOLOGICAL SECTION.

MEETING held Thursday, February 20th, 1913, Sir MALCOLM MORRIS, K.C.V.O., President of the Section, in the Chair.

Dr. ALFRED EDDOWES showed a *case for diagnosis*. The patient, a married man, aged 56 years, showed a remarkably raised, circinate, gyrate, erythematous, psoriasiform eruption, distributed chiefly on the limbs, less upon the trunk, and absent from the head, face, and hands. The eruption had come and gone for several years; but a year ago it became much worse, and had increased up to the present, and now there are several tumours formed. The patient is liable to "indigestion," wind and pain. Wife and five children living and well; two children died in infancy, the latter of whom had a rash soon after birth, and died when four months old, thirteen years ago. There have been no children since, and no miscarriages. At that time, and probably previously, he (the patient) had pimples under the soles of his feet. "Never had syphilis." No internal treatment has been given for twelve months, and no mercurial local treatment for seven months or more. Microscopically the chief change is seen in the epidermis, and presents some of the features of psoriasis, but with more disturbance

* Some of the cases referred to by Sir William Osler in his paper "On Telangiectasis Circumscribed Universalis," *Bull. of the Johns Hopkins Hosp.*, Baltimore, 1907, vol. xviii, p. 401) may perhaps have belonged to the Livedo reticulata group.

in the interpapillary processes. Wassermann's sero-diagnostic test gave a negative reaction in all dilutions.

The PRESIDENT (Sir MALCOLM MORRIS, K.C.V.O.) said that the Section was much indebted to Dr. Eddowes for bringing this case forward, and invited suggestions as to diagnosis and treatment. Personally, having seen five or six cases exactly similar, he had no doubt that it was a psoriasiform type of *Mycosis fungoides*. He believed that considerable benefit would be got from X-ray treatment. One of his patients, whom he never could persuade to present himself before the Section, was treated by means of X-rays, and his life was unquestionably prolonged thereby. The tumours in his own cases came and went, just as they did in Dr. Eddowes' case, but with X-rays they tended to disappear. It would be well if, to this external application of the X-rays, large doses of arsenic were added internally.

Dr. ARTHUR WHITFIELD agreed with the President that this was a case of *Mycosis fungoides* of the psoriasiform type, and that it would be amenable to X-ray treatment, with temporary, if not permanent, benefit to the patient.

Dr. EDDOWES, in reply, said that he was very much obliged for the suggestion, and would certainly use X-rays and arsenic. The history was curious, in that this condition should have come and gone apparently for thirteen years, and should have been diagnosed as psoriasis. He would be very glad to adopt the treatment suggested, and to report progress, if possible, at a future meeting. He added that a microscopic section under low power was on exhibition, and it was striking to see the great change which had taken place in the epidermis, and how little was wrong with the cutis.

Dr. E. G. GRAHAM LITTLE showed a case of *multiple subcutaneous nodules (angiomata)*. The nature of the case was doubtful before microscopic examination of sections, which had since been effected, and this demonstrated the tumours to be a form of angioma. The case had been sent for diagnosis by Dr. W. W. Walker, of Cricklewood, who stated that the patient, E. W—, aged 33 years, a cellarman at a club, had developed these lesions all within the last eighteen months. These were blue subcutaneous swellings, varying in size from $\frac{1}{8}$ in. to $\frac{1}{2}$ in. in diameter, semi-attached to the skin, and movable with it, giving somewhat an elastic feel on pressure, and not apparently changed in colour by deep compression, and in no way tender or sensitive; they were not in the course of veins or nerves, and were distributed chiefly on the backs of both hands, the forearms, forehead, trunk, thighs and legs, in all about thirty or more in number. There was a single brown pigmented mole on the face, but with this exception there was no other pigmented lesion. No visceral disease could be detected; the liver and spleen were of normal size. The man was anæmic but not ill-nourished, and felt well.

The exhibitor had suggested the diagnosis of melanotic sarcomata of primary development in the skin, but the microscopic evidence conclusively demonstrated the nature of the growth, which may be thus described: The epidermis is unaltered. In the middle and deeper parts of the corium are numerous vascular dilatations (cavernous angiomata), the cavities in some cases being partially filled with aggregated masses of blood-cells, and lined with several layers of cells (endothelium showing proliferation). Nuclear mitoses are present in small numbers, but as yet there is no evidence of invasion of the surrounding tissue, and therefore no evidence of malignancy.

The exhibitor has to thank Dr. B. H. Spilsbury, Pathologist to St. Mary's Hospital, for cutting the section and for furnishing part of the above report.

Dr. ARTHUR WHITFIELD said that he did not think the case was one of sarcoma. He believed it would prove to be a case of multiple angio-lipoma.

The PRESIDENT said that some years ago Sir Rickman Godlee showed him a case exactly similar, and which had begun in the same way as this. It was unusual for the condition to begin cutaneously and then go on in the way this had developed. As to whether it was melanotic sarcoma, he did not see how anyone could make a diagnosis except microscopically.

Dr. STOWERS said that in 1893 he brought before the Society a case of melanotic sarcoma of the ear in a girl, aged 11 years. The upper two fifths of the cartilage was removed, and the case had gone on most satisfactorily since then, with no relapse. It was not, however, of the same type as the one under discussion. He thought there was no question as to the diagnosis in Dr. Graham Little's case.

Dr. GRAHAM LITTLE also showed a *case for diagnosis*. The patient was a lad, aged 14 years, who had been sent to the Inoculation Department at St. Mary's Hospital, about three years ago, with a chronic ulceration of both legs below the knees. He had been under observation and treatment for several months at a time. The ulcerations had healed, and broken down again and again. For two years X-rays had been applied, but without much success. Various vaccines, prepared from organisms isolated from his own lesions, had been injected, including staphylococcus, streptococcus and coli bacillus; he had apparently made most progress with staphylococcus vaccines. At the present time the right leg was quite healed over, showing much scarring; but the left leg from knee to ankle was occupied by an infiltrated, sharply circumscribed inflammation of the skin, with

œdema and several rather superficial ulcerations. Opsonic examination repeated frequently showed normal index to tubercle, and the Wassermann reaction had been consistently negative. The boy had been kept from school by his condition during the past three years. There was at present marked anaesthesia of the palate, and the suggestion of artificial dermatitis had been made. The patient would be admitted to hospital and watched with that possibility kept in view.

Dr. J. H. SEQUEIRA said that for a considerable time he had a similar case under his observation at the London Hospital. The patient was a lad about the same age as Dr. Little's patient. He was employed as a telegraph messenger. He developed, apparently as a result of a slight injury, a chronic ulceration on the leg and wrist which lasted for months. As he did not improve as an out-patient he was admitted into the ward, and the lesions were covered with an occlusive dressing. Under this they rapidly healed, but on the boy leaving the ward they soon reappeared. This occurred twice at least. It appeared that the boy, who was earning a small wage, was by some peculiar arrangement under the Employers' Liability Act getting exactly the same weekly payment whether he was at work or away on account of an illness alleged to be due to his employment.

The PRESIDENT could not help thinking that this boy under proper observation would get all right. He could hardly imagine an ordinary patient going on for so long a time. [Dr. GRAHAM LITTLE interjected that the boy was an epileptic and had taken bromides.] The President said that of course this complicated the situation. Bromide sometimes induced an extraordinary sensitiveness. He had a case at the present time in which the patient had developed an eruption on the leg. The patient was compelled to take bromide by order of the physicians, and the skin-lesions were most painful. He asked whether members of the Section had noticed any difference in this respect between the effects of bromide of sodium and bromide of strontium. Physicians who were now giving bromide of strontium for preference said that it did not produce such eruption as the sodium compound. It seemed that there were differences between the various kinds of bromides in this respect, and some were supposed to be non-depressant and not to affect the skin.

Dr. ARTHUR WHITFIELD suggested the use of X-rays. In one case which was sent to him by a colleague the patient, who was taking 60 gr. of bromide per day, had a severe chin eruption. There was no question but that the lumps were diminished by means of the X-rays, and the treatment cleared up the condition for several weeks. He was sorry to say that the lumps had begun to come back, but the X-rays gave, at any rate, temporary relief. He followed the plan, when the condition was very bad, of giving him a pastille dose.

Dr. G. GRAHAM LITTLE showed a case of circumscribed symmetrical dermatitis, "*Parapsoriasis en plaques disséminées*" (Brocq). The patient was a motor engineer, aged about 30 years, in whom the

disease had been present for six years. He had been kindly sent up by Dr. Findlater, of Edgware, to whom the exhibitor expressed his thanks. Patches, roughly symmetrical, of scaly, dry, red, slightly infiltrated dermatitis, ranging in size from 3 in. by 2 in. to discs of about $1\frac{1}{2}$ in. in diameter, were present on the upper and middle of the front of the thighs, on the hips, on the neck, on the legs, the back of the lower third of the forearm and the wrist. The scalp, trunk and face remained free. There was no itching, but slight sensation of burning in the parts affected. Scrapings from the scaly patches had been examined for fungus, with a negative result. The man appeared otherwise well. The extreme persistence of the lesions, which seemed unaffected by ordinary local treatment, their symmetry, and the relative absence of subjective symptoms, bring the case into line with Brocq's group, cited above. The redness of the patches differentiated the case from Crocker's "*Xantho-erythrodermia perstans*."

Dr. ARTHUR WHITFIELD said that in a private case with an appearance of this kind he had found a very large amount of oxaluria periodically (there was no stone), and he wondered whether that was associated at all with the condition. There was an entire absence of pain in this instance. He thought it probable that the case was not a local parasitic affection, but something of the nature of an intoxication. He had frequently examined the scales from such cases and had been unable to demonstrate any parasites.

Dr. J. M. H. MACLEOD said that he considered that the case belonged to the parapsoriasis group and was similar to that described by Brocq as "*Erythrodermie pityriasique en plaques disséminées*," and that it was not the same affection as described by the late Dr. Radcliffe-Crocker under the heading of "*Xantho-erythrodermia perstans*."

Dr. S. ERNEST DORE said that he had seen one such case, which had cleared up under X-ray treatment.

Dr. ALFRED EDDOWES said that he saw no striking difference between this condition and that of Parakeratosis variegata. He had seen cases of the latter in which some parts of the rash looked extremely like this.

Dr. F. PARKES WEBER showed a case, which is described in full on page 81 in the Journal, of *chronic Raynaud's symptoms, probably on a syphilitic basis, associated with Livedo reticulata*.

Dr. ALFRED EDDOWES thought that certain of the symptoms were as likely to be partially due to phlebitis as to arteritis. There was a great likelihood, in his opinion, to be resistance on the vein side, due to endo- and peri-phlebitis—a common condition in syphilis.

Dr. PARKES WEBER said, in reply, that there was no doubt about the presence of arterio-sclerosis in this case.

Mr. J. E. R. McDONAGH showed a case of *frambæiform syphilide of palms*. S. W—, a man, aged 22 years, engineer by trade, contracted syphilis in January, 1912. The chancre on the prepuce was followed by an ordinary generalised maculo-papular eruption, which disappeared quickly under treatment with the exception of some lesions on the face and both palms, which became gradually worse. In spite of twenty-eight intra-muscular injections of grey oil and calomel, potassium iodide internally, and the local application of mercurial ointments, the lesions which the patient now presents have scarcely altered since their appearance nine months ago. If anti-syphilitic treatment is suspended the lesions immediately begin to increase in size.

This case is not shown so much for its rarity, but more with the idea of contrasting it with the *frambæiform syphilide* which most commonly affects the scalp, and which responds to treatment so readily. The behaviour to treatment is no doubt regulated by the blood supply of the part affected, and we have in the *frambæiform syphilide* of the scalp and palms an analogy to the soft and hard node. How peculiarly resistant to treatment are also those hyperkeratotic recurrent syphilitic papules which affect the flexor aspects of the palms and fingers, and not infrequently the nails. The lesions usually appear between the second and fourth year after infection, and in spite of the most vigorous treatment they slowly disappear while fresh lesions take their place. During the last three years Mr. McDonagh has had two cases under his care with the lesions just mentioned, and which were not prevented from recurring by ten injections of salvarsan and continued courses of mercury and iodides.

Dr. R. E. SCHOLEFIELD said that some time ago in private he had an almost exactly similar case, but only one hand was affected. It was on a syphilitic basis, and entirely cleared up under X-rays after being nearly two years in that condition. In that instance ordinary syphilitic treatment had little or no effect, although it had been carried out for a year or more.

Dr. JAMES GALLOWAY remarked that the term "*frambæiform syphilide*" seemed to be more aptly applied to the multiple, definitely papillomatous lesions which made their appearance in the early periods of the disease. These lesions produced very little ulceration. They seemed to be of rare occurrence, but he remembered bringing forward a case some years ago of this type of syphilide. The patient was a young woman who was admitted to the hospital with a

doubtful diagnosis of lymphadenoma, on account of the great enlargement of the lymphatic glands in the neck. On examination she was found to present the remains of a primary infection of the lower lip; the great glandular enlargement was the consequence of this, and was accompanied by a considerable degree of fever and constitutional disturbance. While in this condition she developed a papillomatous frambœsiform syphilide. It occurred, therefore, in an early stage of the malady. The treatment adopted was by means of mercurial inunctions. The eruption rapidly disappeared, leaving practically no ulceration; the glands diminished in size, and the patient, though remaining under observation for some time, had no further manifestations. Ulcerating granulomatous lesions of the palms of the hands, as in the case presented by Mr. McDonagh, were almost always difficult to heal. The position of the lesions and the peculiar characteristics of the epithelium of the palms were probably the chief factors in preventing rapid healing, and it might be well worthy of consideration whether local methods of treatment would be of greater value than too long persistence in general anti-syphilitic medication.

Dr. GRAHAM LITTLE had noted a remarkable improvement in a very chronic tertiary syphilitic lesion, resembling somewhat this case, after two applications of freezing with carbide dioxide snow.

Mr. McDONAGH, in reply, said that he did not mean to suggest that all palmar syphilides did not disappear under treatment; on the contrary, most did so and quickly, and only to those types which remained uninfluenced did he intend to refer. The reason why he gave the name of frambœsiform syphilide to the lesions of the case presented was: (1) because they were indistinguishable from the true lesions of yaws affecting the palms; (2) because they resembled almost exactly the more common type of syphilitic lesion affecting the scalp, which went by the name of "frambœsiform."

Dr. J. M. H. MACLEOD showed (1) a case of *dermatitis following a large dose of arsenic*. The patient was a little girl, aged 7 years. She was a patient of Mr. Devereux Marshall at the Moorfields Eye Hospital for sympathetic ophthalmia, and the exhibitor was indebted to him for kind permission to show the case. She was seen first by the exhibitor at Charing Cross Hospital in December, 1912, when she presented a profuse eruption, most marked on the trunk and face. Previous to that for two months she had been under treatment at Moorfields Hospital with intra-venous injections of salvarsan, and had had 0.4 gm. on October 5th, 0.6 gm. on October 22nd, and 0.6 gm. on November 6th. A week after the last injection the eruption appeared. It came out first on the chest, and gradually involved the arms, face, scalp, upper parts of the thigh and dorsum of the feet, being most profuse on the face and over the abdomen. It consisted of brownish-red macules, circular or irregular in outline, about the size of a pin's head and tending to coalesce to form small irregular patches. Some

of the smaller lesions were follicular in origin. The macules were covered with small greyish adherent scales or horny crusts, which did not extend to the periphery of the macule. It was associated with slight itching. Some days after the eruption appeared the skin of the palms and soles became profusely red, then definitely thickened from hyperkeratosis. This was associated with changes in the nails, consisting of inflammation about the posterior nail-wall, hyperkeratosis of the nail-beds, and a raising up of the free border of the nail.

The symptoms gradually subsided under a soothing calamine cream. At the end of January another injection of salvarsan was given *per rectum*, and a fortnight later an eruption similar to the first attack appeared. When exhibited, the second outbreak had almost completely subsided, except a few indefinite scaly macules and pitting of the nails.

It was difficult to make a firm diagnosis from the condition presented at the time of exhibition. It was suggested that the eruption might be psoriasis, which was improbable, as the original outbreak only superficially resembled that disease, and differed from it in the brownish tinge of the lesions, the adherent, horny scales, and the diffuse keratosis of the palms and soles.

Dr. GRAHAM LITTLE recalled an example of an acute very extensive vesicular eruption, coming out almost like an exanthem, but without rise of temperature, in a lad, aged 15 years, who had been given arsenic for about a week previously to the appearance of the eruption.

Dr. H. G. ADAMSON thought the eruption now present was psoriasis of the punctate type not uncommon in children. He called attention to pitting of the nails, which, he thought, supported the diagnosis of psoriasis.

Dr. F. PARKES WEBER said that, of general exanthems resulting from the internal administration of arsenic the vesicular forms were probably severer, or else more acute, than the dry ones.

Dr. ARTHUR WHITFIELD said that he did not agree with Dr. Adamson with regard to the diagnosis of psoriasis. He considered that the whole eruption might be due to salvarsan, and he did not regard the nails as characteristic of psoriasis. The nail-plate was pitted like the peel of an orange, and this was a frequent concomitant of eczematous dermatitis.

The PRESIDENT said that he thought this was a case of psoriasis. Psoriasis in a very young child was always very difficult to diagnose. He had seen a very large number of cases of arsenical poisoning, but had never seen one like this.

(2) *Three cases of Tinea tonsurans cured by X-rays.* These cases were brought forward to illustrate a difficulty in connection

with the technique. In two of them the defluvium of the hair had taken place, the exposure having been given a month previously; in the third case, which was only X-rayed ten days ago, the hair had not yet fallen out. The technique employed was the usual Kienbock-Adamson method, the Sabouraud pastille being used to estimate the dosage, and the exposures being given at Charing Cross Hospital by Dr. Maurice Hannay, assistant in the Skin-Department. In two of the cases a marked erythema appeared about a week after the exposure, while in the third there was scarcely any perceptible erythema. In the two cases in which the erythema was marked the same tube had been used, in the other case another tube. It has been found that the tube which caused the erythema was capable of doing so with an exposure under a pastille dose, and was, in consequence, a dangerous tube. Some months ago a tube in use in the department behaved in a similar way and led to imperfect re-growth of the hair.

What it was in the tube that made it dangerous the exhibitor had been unable, so far, to ascertain. It did not seem to be any defect in the position of the antikathode, or difference in the thickness of the glass, and the tube appeared to be identical with one made about the same time, which was safe. It was not a question of peculiar susceptibility on the part of the patient, as whenever a "dangerous tube" is used and a pastille dose given marked erythema and impaired re-growth results.

Dr. J. H. SEQUEIRA said that he had occasionally seen slight erythema following the use of the X-rays in ringworm, but he had not been able to trace it to any special tubes. He had not seen such a condition lead to permanent baldness or to any impairment of the growth of hair.

Dr. H. G. ADAMSON said that a possible source of error was a faulty position of the target. He had had the misfortune to produce a dermatitis for which no reason could be discovered, until it was found that the target was so much advanced towards the kathode that the rays which fell on the pastille had to pass through the thicker glass towards the neck of the bulb. As a result, when the pastille registered the B tint, the scalp had already received considerably more than a "pastille dose." Such an error could be avoided in future by carefully testing every new tube with a pastille in the usual position upon the holder and another in the path of those rays which would reach the scalp. They ought, of course, to correspond. An accident of this sort could be also avoided, as Dr. Whitfield suggested, by placing the pastille holder towards the side of the bulb instead of towards the kathodal pole, as was usual in this country.

Dr. S. ERNEST DORE said that at the present time he had a tube which would cause an erythema with half a pastille dose, and had done so in four patients.

Note.—Subsequent reference to the notes of these cases showed that the

erythema appeared within a week after the exposure, and was, therefore, probably due to static discharges from the tube; such a tube would not necessarily cause permanent atrophy of the hair in treating a case of ringworm of the scalp, although it had not been used for this purpose.

[Some discussion ensued upon certain commercial makes of tubes.]

Dr. J. H. SEQUEIRA showed a case of *multiple lupus*. The case illustrated three interesting points: (1) The lupus was very widely disseminated; (2) it followed measles; and (3) its dry, scaly character suggested psoriasis, and it had been treated as such for several years.

The patient, S. H—, aged 11 years, was an only child. His parents were healthy, and there was no history of phthisis or of any cutaneous disease in the family. At the age of three some tuberculous glands, one of which had broken down, were removed from the right side of the neck. At the age of four the child had measles, followed by pneumonia. On his recovery some spots appeared on the thighs, face and neck. About six months later these spots had spread into large patches. An attack of "shingles" also occurred about this time, but after the herpes lesions had cleared up the other spots still persisted. Ointments were applied without relief. As the eruption continued to extend the child was taken three years ago to an infirmary, where the eruption was thought to be psoriasis, and treatment by tar ointment and alkaline baths was carried out steadily for six months. Since then soda baths have been used to keep down the scales.

Recently the boy was seen by another medical man, who thought the case was one of lupus, and he was sent up to the London Hospital for treatment. The boy was well grown, but rather anæmic and rather fat. He has generally good health, but felt the cold very much. There was no evidence of visceral disease, but the bowels were rather inclined to be loose. The eruption had the following distribution: On both sides of the neck and under the chin there were almost symmetrical patches of dry, scaly lupus, one patch being sore and ulcerated from a scratch. On both cheeks there was a small discrete nodule the size of a pea. On the anterior folds of both axillæ and on the posterior fold of the right axilla and on both arms there were many well-defined patches of lupus. The patches were dry, red and scaly, but showed under the diascope characteristic nodules. On both elbows, but more on the left than the right, there were very scaly patches which closely resembled psoriasis. The

extensor aspect of the limbs was more affected than the flexor surfaces. On the outer and inner aspects of the right wrist and the outer side of the left wrist there were lesions of a thicker and more warty character. There were a few small discrete spots on the front of the chest. On the front and inner surfaces of the thighs there were more extensive areas, some as large as the palm of the hand, and some similar patches extending on to the buttocks from the outer surfaces of the thighs. These were all of the dry scaly type seen on the upper limbs. The knees, except for small nodules on the outer aspects, were free. Both calves were the seat of large patches of similar character, but the shins were quite free. In front of the left ankle there were small ovoid areas extending transversely; these had the verrucose character seen on the wrist; in spite of the wide distribution of the disease the back and the scalp were quite free.

The exhibitor looked upon the case as one of the post-exanthematic type, and accepted the explanation which Dr. Adamson had given in similar conditions, that the exanthem, here measles, had caused the breaking-down of a previously existing tuberculous focus. In this case the history exactly supported this hypothesis. Manifestly the case was one which it would be difficult to treat. It would be impossible to apply the Finsen light to more than the areas on the face and neck. It was proposed to deal with the limb areas by strong plasters of creasote and salicylic acid, and to direct attention to the patient's general condition.

Dr. ARTHUR WHITFIELD referred to Dr. Sequeira's remarks as to the absence of any patches on the back, and said that lupus very rarely affected the back above the iliac crests. He had photographed a case for Dr. Colcott Fox in which an extraordinary rapid extension had occurred from a lupus of the face, so that the whole of the front of the body had become converted into lupus tissue, but there was no extension on to the back.

Dr. H. G. ADAMSON said that these cases at an early stage were often mistaken for chickenpox. He did not suppose that they ever arose as multiple infection of chickenpox lesions. It was merely an error of diagnosis suggested by the almost sudden appearance of the lesions. He had seen one case in the Hospital for Hip Disease in this very early stage. The boy had had measles a few weeks before admission, and while in the hospital a profuse generalised papular eruption had appeared. This was thought by the Sister to be chickenpox. The papules, however, though small, were distinct apple-jelly nodules. In a few weeks' time many of these nodules had multiplied to form small typical lupus patches, while many others had faded away.

Microscopical Specimens from Cases of Rhinoscleroma.—The PRESIDENT said that recently he was at Pellizari's clinic in Florence, where three cases of rhinoscleroma were receiving attention. From a culture made from one of them kindly given him by Professor Pellizari, Dr. Dore had made subcultures, and these had been brought for inspection at the meeting. The organism in question was, he believed, so close to the pneumo-bacillus of Friedländer as to be almost unidentifiable separately.

Dr. S. ERNEST DORE said he had made subcultures from Pellizari's original culture. The organism formed a semi-translucent mucoid growth, tending to become white at the top and edges on agar and glucose-agar, and small white colonies on gelatine, which it did not liquefy. It was a short coccoid Gram-negative capsulated bacillus corresponding in every particular to the bacillus described as the causative organism of rhinoscleroma by Frisch, and closely resembled Friedländer's pneumo-bacillus.

THE PRIZES OF THE INTERNATIONAL CONGRESS OF MEDICINE.

On the occasion of the meeting of the Seventeenth International Congress of Medicine in London the *Moscow*, *Paris* and *Hungary* prizes will be awarded.

The Prize of the City of Moscow, value 5000 francs, founded in commemoration of the Twelfth International Congress of Medicine, will be awarded for the best work on medicine or hygiene or for eminent services rendered to suffering humanity.

The Prize of the Thirteenth International Congress of Medicine of Paris, value 4000 francs, will be given to a single person for a discovery or a collection of original works not going back more than ten years, bearing upon medicine, surgery, obstetrics or the anatomical or biological sciences in their application to medical science.

The Prize of Hungary, instituted in commemoration of the Sixteenth International Congress of Medicine, of the value of 3000 kronen, is to reward a work within the domain of the medical sciences which has appeared in the interval between the two International Congresses.

The Bureau of the Permanent Commission of International Con-

gresses of Medicine invite their colleagues to be good enough to nominate the savants whom they deem the most worthy of distinction. It will also be possible for anyone to present himself as a candidate.

The presentation of a candidate must be accompanied by the sending of a copy of the work on which the candidature is based.

No candidate presented after the first of June can be taken into consideration.

The prizes will be awarded during the meeting of the Congress in London in August, 1913.

Address of the Bureau of the Permanent Commission: Hugo de Groenstraat, 10, The Hague, Netherlands.

CURRENT LITERATURE.

LUPUS ERYTHEMATOSUS AND RAYNAUD'S DISEASE. M. B.

HARTZELL. (*Amer. Journ. Med. Sci.*, vol. cxliv, p. 793.)

DR. HARTZELL gives an account of a patient, a young and unmarried woman, aged 24 years, who came under observation in December, 1908. She then suffered from an affection of the hands and feet, especially the fingers and toes. The fingers were apparently somewhat atrophied, were a deep bluish-red colour, with a number of small pearly-white, stippled, scar-like patches scattered over their palmar surface, and a small, thickly crusted ulcer on the palmar surface of the second phalanx of the left thumb, and one on the tip of the left index finger. Similar lesions, though not to such an extent, affected the palms and the toes of both feet. There was also an ill-defined dusky patch on the right ear. Tactile sensation in the fingers was somewhat impaired, and the patient occasionally complained of a numb feeling in the hands as if a band were around the wrist. She suffered much from the most distressing burning and aching of the fingers and toes, which was not continuous, but came on at irregular intervals, being especially severe just preceding the formation of the ulcers. The disease had lasted two years, and had compelled the patient to give up her occupation, which was that of a saleswoman. The condition described continued, gradually becoming more marked. The lividity varied much from time to time, and was apt to occur paroxysmally; occasionally the tips of one or more fingers became dead white and waxy, remaining so for a few hours or two or three days. This condition was usually followed by the appearance of small blebs in the same situation, and later by superficial eschars. On one occasion she reported that the right ring finger became quite black for a short time on her way to the dispensary. In 1909 lesions appeared on each upper eyelid, presenting the features of ordinary Lupus erythematosus. During the following winter her condition became much worse, and, according to her statement, there was always a marked increase in all the symptoms with the appearance of cold weather.

During the summer of 1910 her condition resembled the state noted during the

summer of 1909. She then had a severe attack of facial erysipelas, complicated by malignant endocarditis, which terminated fatally. The writer emphasises the occurrence of vascular phenomena, characteristic of Raynaud's disease, affecting the extremities; while on the ear, eyelids and toes were small atrophic areas, lesions characteristic of erythematous lupus.

It is stated that sufficient attention to this relationship of symptoms has not been given in the text-books on dermatology, but that many references have been made to it in cases reported in the dermatological journals. The author then gives a short *resumé* of thirteen cases extracted from the literature on the subject, most of them from British literature. These bring out clearly the not infrequent occurrence of the association of the symptoms described, an association very familiar to the readers of this journal. The discussion of this relationship has frequently occurred at meetings of the British Societies, and quite recently at the Royal Society of Medicine.

The conclusions to which Dr. Hartzell arrives are that there is very little room for doubt that in most, if not all, of the cases mentioned the erythematous lupus was associated with actual Raynaud's disease, or at least with an affection which simulated that malady so closely as to be practically indistinguishable from it. He says, "The relationship which undoubtedly exists between them may be best explained by supposing both at times to be due to a common cause, most probably some toxin circulating in the blood, which acts primarily upon the vessel walls, producing vaso-motor and inflammatory changes in the skin and subcutaneous tissues. Indeed, cases of the kind here considered seem to me to go far in supporting the view that erythematous lupus should be regarded as a toxic erythema."

J. G.

THE INCIDENCE OF PURPURA IN THE COURSE OF CHRONIC PULMONARY TUBERCULOSIS. JOHN M. CRUCE. (*Amer. Journ. Med. Sci.*, vol. cxliv, p. 875.)

THE author gives a short account of the early recognition of cases of purpura, especially those cases associated with tuberculosis, mentioning the work of Bensaude and Rivet (*Presse Médicale*, 1906, xiv, 469). These authors classify the cases from the clinical point of view in four categories:

- (1) The cases of Purpura hæmorrhagica occurring in the course of miliary tuberculosis.
- (2) The cases of Purpura hæmorrhagica occurring in the course of chronic pulmonary tuberculosis.
- (3) The cases of Purpura hæmorrhagica occurring in the course of latent tuberculosis.
- (4) The cases of Purpura hæmorrhagica occurring in the course of some extra-pulmonary tuberculosis.

The authors state that they have not seen purpura occurring in primary acute miliary tuberculosis, but they have observed it during acute miliary tuberculosis occurring in the course of chronic pulmonary tuberculosis, and that purpura occurring in the course of undoubted chronic pulmonary tuberculosis is much more frequent and most commonly appears in the terminal or cachectic stage of the disease. The most usual form is a simple purpura, the so-called cachectic purpura, but often

a true Purpura hæmorrhagica occurs. In discussing the pathogenesis of purpura they quote the experimental studies of Grenet (*Comptes rendus de la Soc. de Biol.*, 1903, pp. 1509, 1568; *Thèse*, Paris, 1905), who advanced the following thesis—that three factors were necessary for the production of purpura: (1) a hepatic lesion, (2) nervous injury, and (3) an intoxication which acted locally on the nervous system. Grenet states that in purpura there is a toxin that acts as a vaso-dilator by means of the nervous system, and that if the blood is altered by a lesion of the liver or by some of the other viscera, then cutaneous hæmorrhage results from the localised vaso-dilatation. Of the eight cases described by the author one was a case of Purpura hæmorrhagica, and occurred only five days before death in a case of severe tuberculosis of the lungs and other organs, parenchymatous nephritis and fatty liver. In case 2 there occurred hæmaturia, melæna, severe pulmonary and other tuberculosis with simple purpura. Cases 3, 4, 5 and 6 showed simple or cachectic purpura with extensive tuberculous lesions of the lungs and other organs. Case 7 showed extensive pneumonic and ulcerative tuberculosis of the lung with recent miliary tuberculosis, thrombosis of the left internal saphenous vein; cyanosis of this limb occurred with numerous small purple spots. This was a case of mechanical purpura, being caused by venous stasis. Case 8 showed a mild degree of simple purpura, associated with intense jaundice. There was extensive tuberculosis of the lungs, miliary tubercles of the spleen, fatty infiltration of the heart, fatty kidneys, with an unusual caseous tuberculosis of the liver with cirrhosis.

J. G.

FAVUS IN THE NEWBORN. GÉBER. (*Archiv f. Derm. u. Syph.*, October, 1912.)

FROM a study of twelve cases, seven of which appear to have been infected by one woman who had suffered from favus of the scalp for twenty years, the author fixes the incubation period of the disease at from six to ten days.

He also draws attention to the fact that infection in infants is commonest where maceration of the skin, *i. e.* in the napkin area, is most apt to occur, and he establishes the importance of this observation by a series of experimental inoculations (by rubbing in) on skin previously macerated by the application of antiseptics, using as controls the inoculation into the healthy unmacerated skin of the other arm. In fourteen cases he obtained a positive result in nine cases on the macerated skin, and a negative in every case on the normal side.

He maintains that infection depends not so much on the virulence of the culture as on the great susceptibility to infection of the newly born infant, and he describes at considerable length the naked-eye changes observed from the commencement of the lesion, which in infants is often herpetic in type, to the full development of the scutulum.

H. C. S.

QUARTERLY SURVEY OF DERMATOLOGICAL LITERATURE.

ERYTHEMA, INFLAMMATIONS, ETC.

- Acanthosis Nigricans**, with Report of a Case. ALFRED SCHALEK. (*Journ. of Cut. Dis.*, November, 1912, p. 660.)
- "Angio-lupoid."** BROcq and PAUTRIER. (*Ann. de Derm. et de Syph.*, January, 1913, p. 1.)
- Arnica Dermatitis.** F. R. PROCTOR-SIMS. (*Brit. Med. Journ.*, December 21st, 1912, p. 1707.)
- Atrophia Maculosa Cutis Idiopathica (Dermatitis Atrophica Maculosa).** R. HAMMER. (*Dissertation Univ. Rostock*, December, 1912.)
- Auto-vaccination of the Tongue.** LUBLINSKI. (*Berl. klin. Wochenschr.*, 1912, No. 51, p. 2407.)
- Brocq's Disease, A Case of.** CALLOMON. (*Archiv f. Derm. u. Syph.*, December, 1912.)
- Chigger Flea or "Chigoe" in the Transvaal.** The. H. A. SPENCER. (*Transvaal Med. Journ.*, 1912, vol. viii, p. 133.)
- Chronic Exfoliative Dermatitis.** PASQUALE. (*Giorn. Ital. d. Mal. Ven. e della Pelle*, 1912, fasc. vi, p. 695.)
- Chronic Ulcers of Leg.** W. BRADY. (*New York Med. Journ.*, 1913, vol. xcvii, p. 296.)
- Cutaneous Gangrene in Typhoid Fever.** ALEX. PH. CH. ROUHAUD. (*Paris Thèses*, No. 262, 1911-12.)
- Eczema**, Particularly the Occupational Eczema, The External Origin of. F. C. KNOWLES. (*Journ. of Cut. Dis.*, January, 1913, p. 11.)
- Eczema**, Speculations as to the Causation of. J. C. JOHNSTON. (*Journ. of Cut. Dis.*, January, 1913, p. 3.)
- Eczematoid Affection of the Hands, A Recurrent.** S. POLLITZER. (*Journ. of Cut. Dis.*, December, 1912, p. 710.)
- Eczematoid Ringworm.** Recent Advances in Dermatology. J. M. H. MACLEOD. (*Practitioner*, December, 1912, p. 827.)
- Elephantiasis of the Vulva.** V. B. GREEN-ARMYTAGE. (*Journ. Obstet. and Gyn.*, 1912, vol. xxii, p. 270.)
- Erythema Evoked by the X-Rays, Temporary.** C. M. MACKEE. (*Journ. of Cut. Dis.*, p. 703.)
- Herpes Zoster during Child-bed.** HANS KUNG. (*Zentralb. f. Gyn.*, 1913, No. 4.)
- Impetigo Herpetiformis Gravidarum, A Typical Case of.** DE AMICIS ARTURO. (*Giorn. Ital. d. Mal. Ven. e della Pelle*, 1912, fasc. vi, p. 710.)
- Iodin and Mercury on the Skin, Irritation from.** S. R. KARPELES. (*Journ. Amer. Med. Assoc.*, 1912, vol. lix, p. 2254.)
- Keratoderma Blennorrhagica.** H. SWIFT. (*Australasian Med. Gaz.*, 1912, vol. xxxii, p. 549.)
- Keratosis, Blennorrhagic.** B. H. ROARK. (*Journ. Amer. Med. Assoc.*, 1912, vol. lix, p. 2039.)

- Keratosi Follicularis (Darier's Disease)**, Report of Four Cases of. W. MOOK. (*Journ. of Cut. Dis.*, December, 1912, p. 722.)
- Lupus Erythematosus Disseminatus**, Report of a Case of. A. J. GILMOUR. (*Med. Record*, 1912, vol. lxxxii, p. 1160.)
- Neurodermitis Chronica Faciei (Lichen Simplex Chronicus Faciei)**, On. HOFFMANN. (*Derm. Zeitschr.*, 1913, H. 2, p. 117.)
- Occupation Skin-Diseases**. J. A. FORDYCE. (*Journ. Amer. Med. Assoc.*, 1912, vol. lix, p. 2043.)
- Œdema**, Contribution to the Study of Unilateral. YVES THOMAS. (*Paris Thésis*, No. 280, 1911-12.)
- Parapsoriasis "en plaques,"** On. BIZZOZERO. (*Giorn. Ital. d. Mal. Ven. e della Pelle*, 1912, fasc. vi, p. 688.)
- Pemphigus cured by Intra-venous Injection of Salvarsan**. A. LINDEMANN. (*Inaugural Dissertation Jena University*, Jena, 1912, 23 S. R. Noske, Leipzig, Borna.)
- Pemphigus**, A Case of Total Symblepharon from. W. L. MEYER. (*Gesellschaft für Natur- und Heilkunde zu Dresden.*) (*Münch. med. Wochenschr.*, February 11th, 1913, ix, p. 324.)
- Primula Dermatitis**. H. A. SHARPE. (*Journ. Amer. Med. Assoc.*, 1912, vol. lix, p. 2148.)
- Professional Dermatitis of the Hands**, Study of. PIERRE HUE. (*Paris Thésis*, 1911-12, No. 436.)
- Psoriatics**, The Ehrmann "Frog Eye" Phenomenon in the Blood-serum of. SOMMER. (*Berl. klin. Wochenschr.*, 1913, January, p. 61.)
- Psoriasis**, A Neurosis. W. P. CUNNINGHAM. (*Med. Record*, 1912, vol. lxxxii, p. 1031.)
- Psoriasis**, Treatment of, by Baths of Medicated Emulsions. HENRI WILMET. (*Paris Thésis*, 1911-12, No. 399.)
- Psoriasis: Its Histology and Pathogenesis**. HASLUND. (*Archiv f. Derm. u. Syph.*, December, 1912.)
- Purpura in Tuberculosis**. GEORGES MONNOT. (*Paris Thésis*, 1911-12, No. 284.)
- Purpura**, Towards the Study of Nephritis in the Course of. ETIENNE ROUX. (*Paris Thésis*, 1911-12, No. 12.)
- Purpura Fulminans**. J. A. M. CAMERON. (*Lancet*, November 23rd, 1912, p. 144.)
- Rhinophyma**. J. C. WOOD. (*Surg. Gyn. and. Obstet.*, 1912, vol. xv, p. 622.)
- Sarcoptic Mange of Dog and Cat**, Transmission of, to Man. A. WHITFIELD and F. HOBDAV. (*Veterinary Journal*, November, 1912.)
- Scleroderma**, Clinical Course and Therapeutics of. KÖLLE. (*Münch. med. Wochenschr.*, 1912, No. 16.)
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THE CLASSIFICATION OF THE CHRONIC RESISTANT MACULAR AND MACULO-PAPULAR SCALY ERYTHRO- DERMIAS.

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THE possible relationship of the various conditions comprising that ill-defined group of dermatoses for which Fox and MacLeod ("On a Case of Parakeratosis Variegata," *Brit. Journ. Derm.*, 1901, p. 319) have suggested the very apt designation of "chronic resistant scaly erythrodermias" is a matter of more than academic interest.

Brocq ("Les erythrodermies pityriasques en plaques disseminées," *Rev. gen. de clin. et de therap.*, 1897, p. 577; "Les Parapsoriasis," *Ann. de Derm. et de Syph.*, May, 1902; "Parapsoriasis," *Journ. Cut. Dis.*, 1903, p. 315; *Traité Elementaire de Dermatologie Pratique*, Octave Doin, Paris, vol. ii, p. 221) would classify the various clinical entities under the general heading of "parapsoriasis," with three subdivisions—Parapsoriasis guttata, Parapsoriasis lichenoides, and Erythrodermie pityriasque en plaques disseminées—and would include in the group not only Unna's ("Ueber die parakeratosen im allgemeinen und ein Neu Form derselben [Parakeratosis variegata]," *Monats. f. prakt. Derm.*, x, p. 404) Parakeratosis variegata, but also Jadassohn's ("Ueber ein eigenartiges psoriasiformes und lichenoides exanthem," *Verhand. der deutschen Gesellsch.*, fifty-fifth Congress, Breslau, 1894; *Dermatitis nodularis psoriasiformis*, *Festschrift*, Kaposi, 1900), psoriasiform and lichenoid exanthem and nodular psoriasiform dermatitis, Neisser's ("Zur frage der lichenoiden eruptionen," *Verhand.*

der deutschen Dermat. Gesellsch., fifty-fifth Congress, Breslau, 1894) lichenoid eruption, Fritz Juliusberg's ("Über einen Fall von psoriasiformis and lichenoiden Exanthem," *Archiv. f. Derm. u. Syph.*, 1897, p. 256; "Pityriasis lichenoides chronica," *Archiv. f. Derm. u. Syph.*, 1899, p. 350) psoriasiform and lichenoid exanthem and Pityriasis lichenoides chronica, Boeck's (cited by Juliusberg, *loc. cit.*) Dermatitis variegata, Crocker's ("Lichen variegatus, *Brit. Journ. Derm.*, 1901,

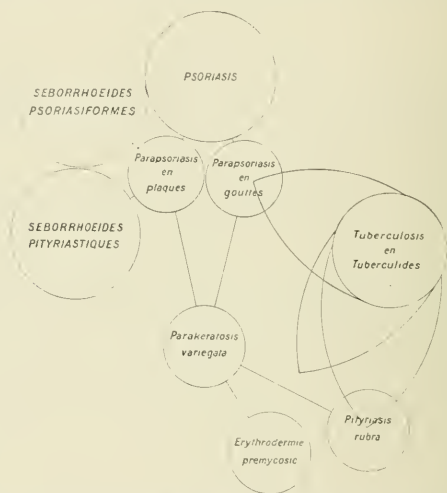


Diagram showing Civatte's conception of the relationship of the chronic resistant scaly erythrodermias to psoriasis, seborrhoeic dermatitis, pityriasis rubra, and tuberculosis and the tuberculides.

pp. 19 and 55) Lichen variegatus, Colcott Fox and MacLeod's ("On a case of Parakeratosis Variegata," *Brit. Journ. Derm.*, 1901, p. 319) resistant muculo-papular scaly erythrodermias and the Dermatosi squamosi anormale of Casoli ("Dermatosi squamosae anormale," *Giorn. ital. d. mal. ven.*, 1901, pp. 719, 742 and 749).

Civatte (*Thèse de Paris*, G. Steinhil, Paris, 1906; "Pour servir à l'étude des tuberculides papulo-squameuses, etc.," *Ann. de Derm. et de Syph.*, 1906, p. 210) believes that many of the disorders of this class bear a definite relation to tuberculosis and the tuberculides. It is

interesting to note, however, that the sections from one of Civatte's cases were histologically identical with those from Darier's (*Tr. Soc. de Dermat.*, Paris, February 4th and April 11th, 1904) case of "Sarcoïde cutanée," consequently, as Menahem Hodara ("Ein Fall von Parakeratosis Variegata, etc.," *Monats. f. prakt. Derm.*, Bd. lv, Nr. 27, S. 848) intimates, it is probably safer to consider each case in all its aspects, and not place too much stress upon any single clinical or histo-pathological phase.

In describing the symptom-complex for which Pernet suggested the name "Xantho-erythrodermia perstans," Crocker (*Brit. Journ. Derm.*, 1905, p. 119) was at first in doubt as to whether it should be considered as a hitherto unknown affection, or included under "Erythrodermie pityriasque en plaques disséminées"—one of the cases, No. 10 in the series, being clinically distinguishable from this variety of Brocq's disease—but finally, in view of the large size of the affected areas, their smoothness and yellowish colour, their more or less regular distribution, the presence of a distinct degree of infiltration in a large proportion of the patches, and the favourable manner in which the lesions responded to treatment, he concluded that the condition did not belong to the parapsoriasis group. In Crocker's opinion, Dermatitis psoriasiformis nodularis, Parakeratosis variegata and Erythrodermie pityriasque en plaques disséminées all were but different manifestations of a single disease, which he preferred to call "Lichen variegatus"—a clinical term designating a conspicuous feature of many of the typical cases that had been described. The appellation "parakeratosis," first rather vaguely employed by Auspitz (*System der Hautkrankheiten*, Wien, 1881) in 1881, and later, clearly defused by Unna (*The Histo-pathology of the Diseases of the Skin*, Walker's translation, McMillan & Co., New York, 1896, p. 196), as indicating "a parenchymatous œdema of the transitional epithelium," Crocker would not accept. At present, however, the consensus of opinion, judging from the literature, would indicate that Unna's definition and adoption of the term have met with general approval.

During the past year I have had an opportunity to study a typical case of Xantho-erythrodermia perstans, and also an example of a chronic, resistant, lichenoid dermatitis, the symptomatology of which is rather unusual, and unlike that of any other dermatosis that I have been able to find described.

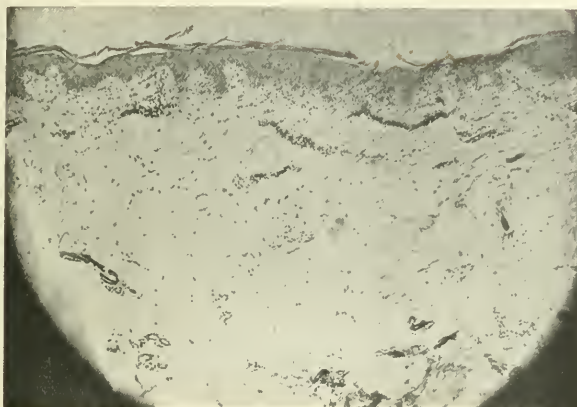
CASE 1.—A. R—, female, housewife, aged 43 years. Referred to me by Dr. L. V. Dawson, of Odessa, Mo. The patient was a native of Ohio, and a resident of Missouri. The cutaneous history of the family was negative, and the patient herself had never before suffered from a disease of the skin. Her general health had always been excellent. About eight years prior to the date of consulting me, she first noticed the presence of several streak-like areas of yellowish-brown discoloration on her arms and thighs. The long axes of the majority of the lesions were parallel with those of the affected limbs. Subjective symptoms were absent. The patient supposed the pigmented patches to be due to "liver trouble," and paid little attention to them. The areas gradually increased in number and extent, many of the newer ones merging, wholly or in part, with the older, the partial conjunction resulting in the formation of peninsulas or islands of normal skin framed within the bisque coloured patches.

On examination, the patient was found to be a strong, well-nourished woman, a brunette, 5 ft. 8 in. tall, and weighing 146 lb. A general physical examination gave a negative result. The skin on parts other than the limbs was normal. The buccal mucous membrane was unaffected.

The outer aspects of the arms were involved to a somewhat greater extent than the inner, and the left limb more than the right, although the lesions were distributed in a roughly symmetrical manner over all four extremities. The individual patches were oval or oblong in outline, yellowish or pinkish in colour, and very slightly scaly. On superficial examination they appeared to be elevated, but on closer inspection it was found that this was not the case, all of the lesions being flat and on a level with the normal skin. The borders were not sharply defined, although the affected areas could be readily distinguished, by both sight and touch, from the normal. On palpation it was found that all of the patches were infiltrated, the skin, when a fold was pinched between the fingers, appearing much thicker and less flexible than usual.

For microscopical study three pieces of tissue were excised, two from near the centre of one of the most characteristic lesions on the left forearm, and one from a small island of apparently normal skin on the right upper arm. The material was fixed in aqueous formalin solution, and mounted and cut in paraffin. The usual stains were

PLATE I.



CASE 1.—Xantho-erythrodermia perstans. The infiltration is greatest in the vicinity of the vessels. (Spencer 0.25 obj., no ocular).



CASE 1.—Erythrodermie pityriasque en plaques disséminées (L. S. Brown's photograph of Chas J. White's section).

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employed. The piece of skin from the right arm appeared to be normal in every way. The other two specimens were histologically identical, and one description will suffice for both. The corneous stratum was composed of four or five layers of loosely interwoven, non-nucleated cellular strands, precariously attached to a much attenuated stratum granulosum. No trace of the presence of a stratum lucidum could be discovered. Throughout the prickle layer, which was reduced in depth to five or six cells, œdema was a constant and pronounced feature. Both nuclei and protoplasm stained poorly. The usual regular and uniform arrangement of the basal layer was entirely lost. The cells were not only erratically and unevenly arranged, but many had lost their nuclei, and in some localities, as in the regions higher up in the rete, neighbouring cells reacted to the basic and acid elements in the various dyes in an exactly opposite manner.

The corium also was markedly œdematous, particularly at the higher levels.

The coil glands and ducts were apparently normal in every way.

The papillæ were somewhat flattened, but less so than in a typical example of Erythrodermie pityriasque en plaques disseminées. The swollen bundles of collagen reacted poorly to the various stains, and were dimly and indistinctly outlined. The most conspicuous change to be noted in the cutis, however, was the presence of a wide-spread cellular infiltration. While an occasional polymorphonuclear leucocyte or mast-cell was to be seen, the majority of the cells were of the small round variety, staining deeply with the basic dyes. Although the infiltration was greatest in the immediate vicinity of the larger vessels, the papillary bodies were far from immune, the small round type of cells predominating here also. No giant-cells, caseation or signs of arterial thickening were to be seen, and the pathologic picture was far more suggestive of a general blood condition than of a local infection.

Treatment.—Internally, sodium salicylate and the alkalies were given. For local application, a salicylic acid and sulphur mixture, in an ointment, was first prescribed, but this was replaced later by a salicylic and tar preparation, together with calamine lotion. Improvement has been slow but continuous, and the early and complete disappearance of the lesions is apparently certain.

CASE 2.—C. M—, male, single, draughtsman, aged 23 years. This patient, who was referred to me by Dr. A. Freymann, was a native of Italy, but had resided in Kansas City for the past eleven years. The cutaneous history of the family was negative. The patient's health had always been good. There was no history of tuberculosis in the family so far as he or his parents knew.

The disease from which relief was sought had appeared about three years prior to the time of consultation. The lesions, which began as small, reddish papules, and gradually increased in size until they were 5 cm. or more in diameter, were rounded or oval in outline, slightly elevated, and pinkish or violaceous in colour, and were located in the inguinal regions. In the course of a few months others developed on various parts of the trunk, face and limbs. The distribution was roughly symmetrical, and the affected areas were lichenoid in character, free from scales, or only slightly scaly, and gave rise to no subjective symptoms whatever. There was considerable underlying infiltration. The patches were sharply outlined. The mucous surfaces had never been involved. On examination, the patient was found to be a well-nourished, but rather slightly built individual, 5 ft. 7 in. tall, and weighing 131 pounds. There was a slight reaction—1.2° F.—to tuberculin by injection, with no perceptible change in the lesions. A Wassermann serum test, performed by Professor W. K. Trimble, gave a negative result. Blood and urine analyses, made on three different occasions, revealed nothing abnormal. The affected areas were situated mostly on the trunk, although there were three patches, circular in outline, on the face, two being in the right inferior maxillary region, and the other just in front of the left ear, a few irregularly distributed lesions on the arms and a half dozen or more on the lower limbs.

There was no predilection shown for the extensor surfaces of the elbows or knees. The finger-nails, particularly those on the left hand, were involved, the changes present closely resembling those in one of Brocq's (*Traité Élémentaire de Dermatologie Pratique* vol. ii, p. 381, fig. 329) cases of parapsoriasis. The palms were unaffected, however, and the scalp also was free from the disease. In the inguinal regions the patches had merged to some extent, the result being a large, butterfly-shaped area of affected skin, studded here and there by a small island of normal integument. The last mentioned feature was

PLATE II.



CASE 2.—Psoriasis lichenoides, showing arrangement and lichenification of patches in right groin.



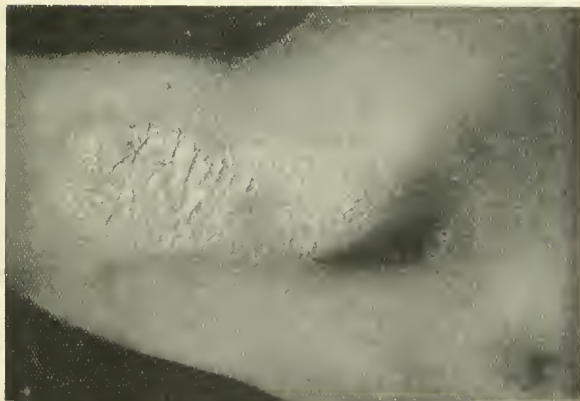
CASE 2.—Psoriasis lichenoides, showing general arrangement of lesions in injured regions.

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PLATE III.



CASE 2.—Psoriasis lichenodes, lesions on nails.



CASE 2.—Psoriasis lichenodes, lesions in left axilla.

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much more pronounced later, after the case had been under treatment for several weeks. In addition to the large, irregularly shaped patch on the lower abdomen, there were a number of small, circular or oval satellite lesions in this locality. There was an oblong, slightly scaly area in the left axilla, which was less infiltrated and much lighter in colour than the lesions on other parts of the body. The patches on the cheeks were rather scaly at first, the exfoliating epidermis being quite tightly adherent. When the scales, which were large, and a dirty grey in colour, were forcibly removed, however, no bleeding followed. On the body and limbs the follicles were more prominent than usual, but no horny plugs or other suggestive abnormalities, were to be found.

For laboratory purposes four pieces of skin were excised, two from the affected area in the left groin, one from a small and typical lesion near the umbilicus, and one from the patch in the left axilla. The material was fixed in formalin solution, dehydrated, and two of the specimens blocked in celloidin and two in paraffin. For staining purposes, methylene-blue (Unna-Pappenheim), hæmatoxylin, hæmatoxylin-eosin, Weigert's combination and Gram-Weigert mixture were employed.

The two pieces of tissue from the inguinal region and the one from near the umbilicus showed practically identical changes. The one from the axilla will be described separately.

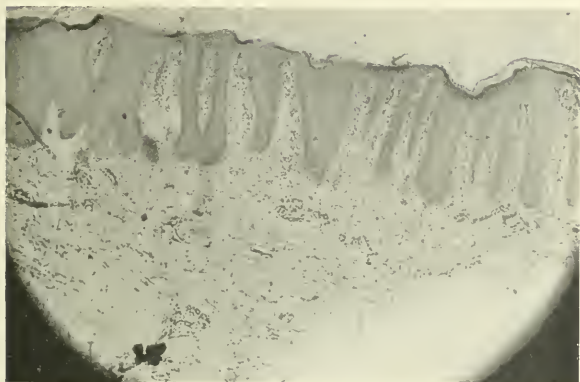
The alterations were most pronounced in the epidermis and in the upper corium. The stratum corneum, which was somewhat thickened, was so dense as to appear almost homogeneous throughout its greater depth, only a slight overlying scale occasionally being observed. Small accumulations of epithelial *debris* marked the site of the inter-papillary depressions. The granular layer was only fairly preserved. The prickle layer was considerably thickened, the increase in depth being apparently due more to the presence of a wide-spread inter- and intra-cellular œdema than to an actual increase of epithelial elements. The accumulation of fluid was greatest at the lower levels, gradually decreasing as the stratum granulosum was reached. The cells stained fairly well under the circumstances. The œdema involved not only the intercellular spaces and the cells themselves, but also many of the nuclei. No leucocytes were found in the epidermis. The disposition of the cells comprising the basal layer of

the rete was less regular than normal, although the erratic arrangement and peculiar tinctorial reactions that were such conspicuous features in the *Xantho-erythrodermia perstans* sections were entirely lacking.

In the corium, the most noticeable change was the dilatation of the blood-vessels, particularly in the papillary region. The papillæ were increased in height, and appeared swollen and œdematous. While no proliferative endothelial changes could be found in the corial capillaries, perivascular infiltration, mostly small cell, was constant throughout the upper cutis. The œdema was greatest in the neighbourhood of the vessels, and was sufficient to not only increase the size of the spaces separating the bundles of connective tissue, but also materially affected both the contour and the staining qualities of the collagenous substance itself. In the papillary region the elastic fibres stained poorly and unevenly, and had a swollen, "fuzzy" appearance. There was no fragmentation, however, and the tissue seemed to be normal in amount. Deep in the cutis the elastin appeared to be unaffected.

In the specimen from the axillary region the corneous layer was not so thick, nor so tightly attached, as in other sections, although the homogeneous appearance and the almost inappreciable degree of scale-formation were present here also. The stratum granulosum was diminished in thickness at some points and altogether absent at others, as in the previous specimens. The prickle layer also was diminished in thickness, in places being only two or three cells deep. (Edema was a prominent and constant feature. In some instances the nuclear spaces were so dilated that the nuclei appeared to be lying free in the cavities. The intercellular channels were greatly expanded. The process of infiltration must have been very gradual, inasmuch as few of the prickles were broken, although the majority were stretched to their fullest capacity. The nuclei were little affected. In two instances leucocytes were found within distended rete cells. The basal layer was less regular than in the preceding specimens, although the cells stained evenly and fairly well. Many were enormously distended, however, and a few had lost their nuclei. The papillæ were much more slender than in the inguinal sections, although fully as tall. Perivascular infiltration was a prominent feature throughout the upper corium. There was pronounced œdema of the fibrous stroma. Both collagen and elastic tissue reacted to the

PLATE IV.

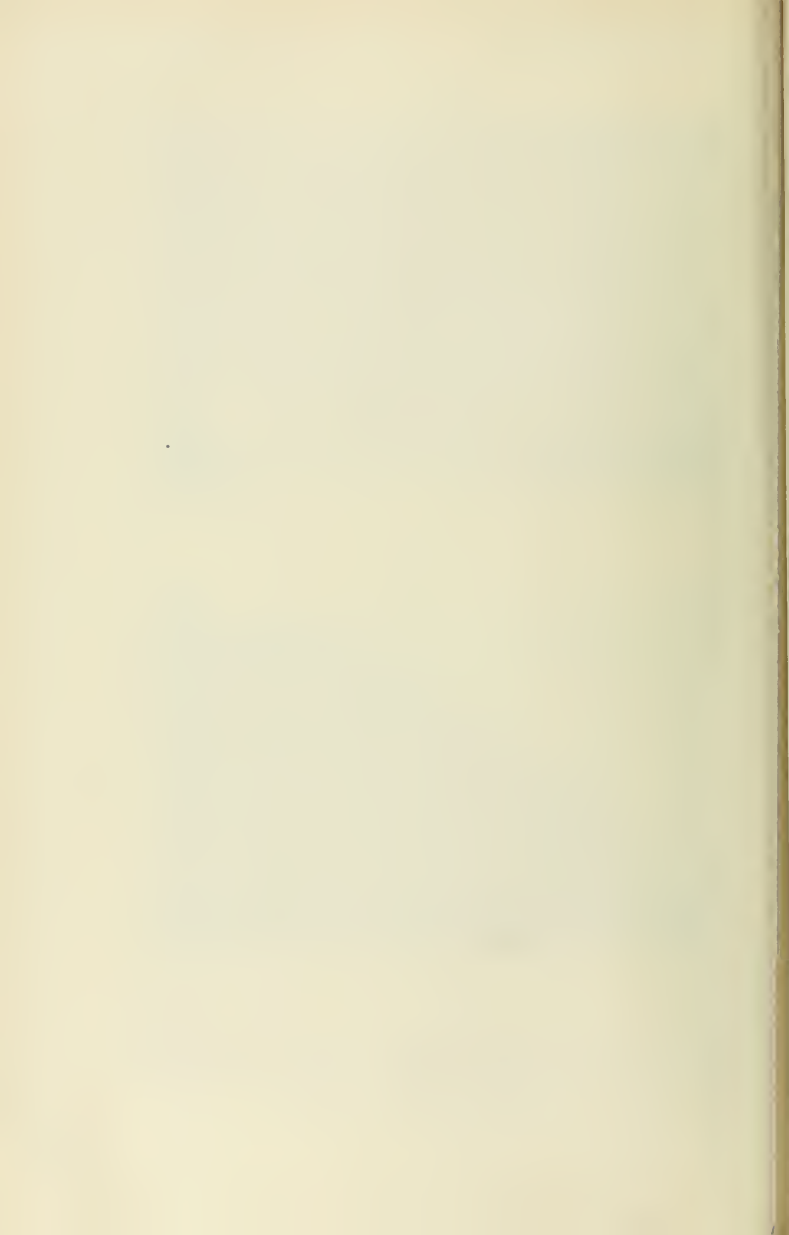


CASE 2.—Psoriasis lichenodes, lesion in axilla, showing papillary hypertrophy and oedema of rete. (Spencer 0.25 obj. no ocular.)



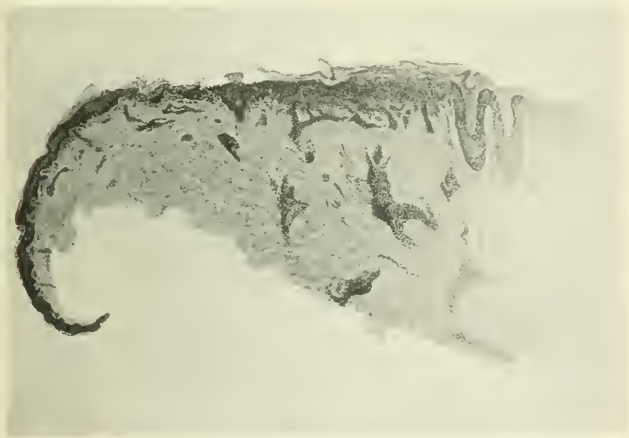
CASE 2.—Psoriasis lichenodes, showing condition of corneous layer, oedema of rete, and cellular infiltration of corium. Inguinal lesion (Spencer 0.25 obj., no ocular).

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various dyes in a manner similar to that observed in the earlier sections, and the changes present were evidently practically identical.

Treatment.—Internally, arsenic and salicin have been given. Locally, salicylic acid, tar, chrysarobin, pyrogallol and Pusey's carbon dioxide snow have been employed. On the smaller lesions, the snow, applied with moderate pressure, for periods of fifteen or twenty seconds, proved quite efficacious. The larger patches did not respond so well, although a certain degree of improvement was manifested.



Parakeratosis variegata (Menahem Hodara's section and photograph).

It was not convenient for the patient to come frequently to the office, consequently the Röntgen rays have not been tried.

At this time, eight months having elapsed since treatment was first instituted, the patient's condition, from a cutaneous view-point, is about 40 per cent. better than when I first saw the case.

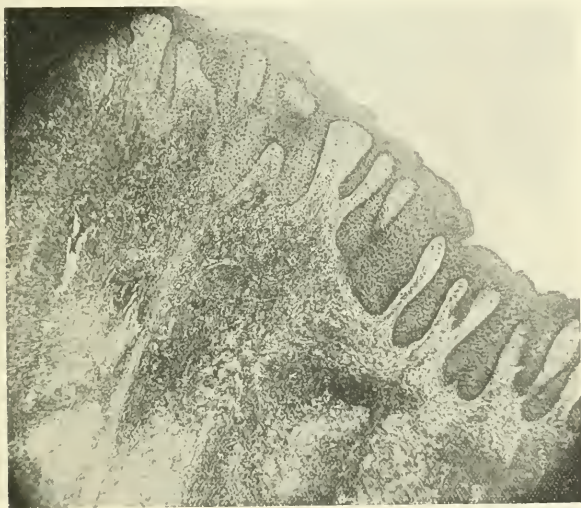
While the disease represented by Case 2 undoubtedly belongs in the group of chronic resistant scaly dermatoses, its exact position is a matter of doubt. Its symptomatology does not conform with that of either Parakeratosis variegata or Parapsoriasis lichenoides, although there is some resemblance to both Neisser's lichenoid eruption and

Jadassohn's psoriasiform and lichenoid exanthem. Probably the best and simplest plan would be to group this affection, together with Neisser's and Jadassohn's and the condition described by Julinsberg, under one name. The most appropriate designation, and one which, I am informed by Dr. Achilles Rose, one of our foremost medical onomatologists, will combine the descriptive meaning of psoriasis-like, lichenoid and dermatitis, is "Psoriasis lichenodes."

I cannot accept Anthony's ("Report of a Case of Parakeratosis Variegata," *Journ. of Cut. Dis.*, 1906, p. 455) conclusion that the pro-

gressive pigmentary dermatosis first described by Schamberg ("A Peculiar Progressive Pigmentary Disease of the Skin," *Brit. Journ. Derm.*, 1901, p. 1), and later by Little (case report, *Brit. Journ. Derm.*, 1902, p. 266), simply represents an early stage of Xantho-erythrodermia perstans. "Cayenne pepper-like" petechiæ have never been noted in Crocker's disease; in fact, taking into consideration the histo-pathology of the affection their presence would be somewhat of an anomaly. The infiltration in the vicinity of the coil-gland ducts which was so conspicuous a feature in Schamberg's sections was totally absent in both Pernet's and my own specimens. The pigmentation in Schamberg's disease might more properly be called a post-dermatitic dyschromia than a xantho-erythrodermia.

The only other condition with which I am familiar that might enter into a consideration of the chronic resistant scaly inflammations of the skin is the so-called pre-mycotic dermatitis. I have had opportunity to study but two cases of *Mycosis fungoides* at this stage, but judging from the reports of other observers as well as from the findings in these two instances, I must agree with Chas. J. White ("Erythrodermie pityriasque en plaques disséminées," *Journ. Cut. Dis.*, 1903, p. 153) that



Premycotic dermatitis, two years' duration, lesion in region of right clavicle.
Note character of cellular infiltration.

pruritus, a symptom which is almost or totally absent in *Erythrodermie pityriasque en plaques disséminées* and allied conditions, is practically always a distressing and persistent factor in the earlier stages of *Mycosis fungoides*. A second valuable, although less constant, diagnostic feature in this disease is the deep-seated character of the cellular infiltration. The histological changes also, while not invariably characteristic in the earlier stages, are usually sufficiently distinctive to form a corroborative link in the chain of diagnostic evidence.

The fact that this disorder, at its beginning, occasionally bears some clinical resemblance to the diseases under discussion is not of sufficient weight to permit of its inclusion in the group, despite the rather elastic character of the essential clinical and histological requirements.

Conclusions.—There are certain cutaneous disorders which combine in greater or lesser degree the clinical characteristics of seborrhœic dermatitis, psoriasis and Lichen planus. For the sake of brevity, it would be well to class all of these conditions under the general heading

of the chronic resistant macular and maculo-papular scaly erythrodermias. From a strictly scientific view-point, however, it is probably best to separate the various conditions into groups, placing in each group only those disorders which bear a close clinical and histo-pathological resemblance to each other.

At the bottom of the list may be placed Crocker's Xantho-erythrodermia perstans, and at the top, the Parakeratosis variegata of Unna, Santi and Pollitzer, with Brocq's parapsoriasis group, and Psoriasis lichenodes, in which is included Neisser's lichenoid eruption, Jadassohn's psoriasiform and lichenoid exanthem and nodular

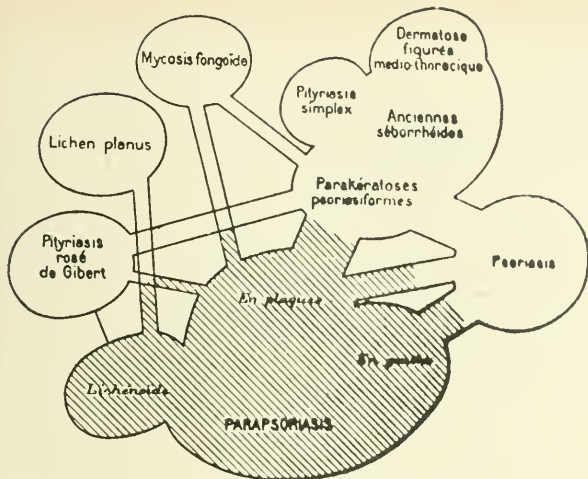


Diagram showing Brocq's idea of the relationship of the parapsoriasis group to some of the better known diseases.

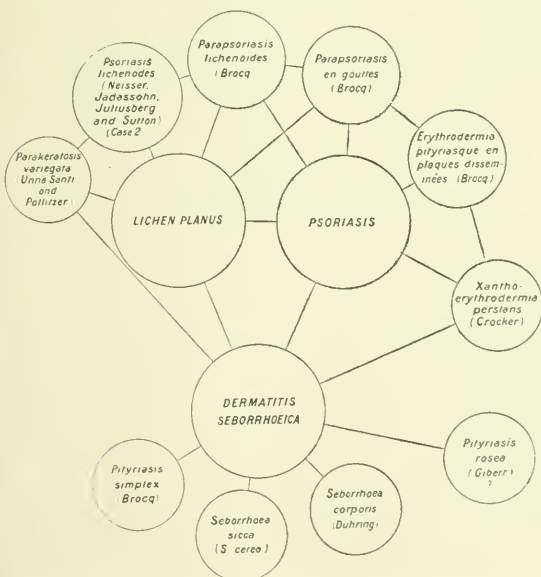


Diagram showing the relationship of the chronic resistant scaly erythrodermias to psoriasis, Lichen planus, Dermatitis seborrhœica and the seborrhœides. (The inclusion of Pityriasis rosea in the last-named group is hypothetical). Footnote reference to the last line: See G. H. Fox, *Amer. Med. Assoc.*, August 17th, 1912, p. 493.

psoriasiform dermatitis, Juliusberg's Pityriasis lichenodes chronica and the condition exemplified in Case 2, here reported, intervening.

While this arrangement may be open to criticism, in view of the fact that our knowledge of several, in fact all, of the conditions is more or less incomplete, it is only by the adoption of a comprehensive classification that the science of dermatology will be advanced. The charge is often made that we already recognise too many affections of the skin. If the diseases exist, it is our duty to familiarise ourselves with their symptomatology, and not dodge a professional responsibility by converting well-defined clinical entities into ragged and embarrassing scrap-heaps.

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ROYAL SOCIETY OF MEDICINE.

DERMATOLOGICAL SECTION.

MEETING held Thursday, March 13th, 1913, Dr. J. H. STOWERS, Vice-President, in the Chair.

Dr. E. G. GRAHAM LITTLE showed a case of *Alopecia areata* and *Tinea tonsurans*. The child had not had alopecia until the ringworm developed. That order of events was common. The alopecia usually lasted for six months, and then the hair grew again. Dr. Little had not known such a case remain permanently bald. He thought the alopecia could arise without there being any definite inflammatory disturbance.

Dr. STOWERS said he published a case some years ago in which the two disorders occurred simultaneously on the scalp of a patient, and eventually coalesced. It was later referred to by Dr. Alder Smith in his treatise on ringworm.

Mr. G. F. HENTSCH said it had been found that 33 per cent. of cases of alopecia had previously had ringworm.

Dr. J. M. H. MACLEOD showed a case of *folliclis in a woman, aged 23 years*. The patient was a tall, rather delicate-looking young woman, a dressmaker by occupation. There was a definite family history of tuberculosis, and the patient herself had tuberculous adenitis as shown by swollen glands on the right side of the neck, and the scars resulting from two operations. On the hands and feet there were typical lesions of folliclis consisting of indolent red papules or nodules, slight ulcerations, and numerous white atrophic scars. She had suffered from folliclis for the last five years, the lesions invariably coming out when the cold weather set in in winter, and disappearing in the spring. The object of showing the case was to emphasise the relation of the affection to tuberculosis, for in this case, in addition to the typical folliclis lesions on the extremities, there was a number of brownish papular lesions on the face which underwent necrosis and left a scar. On pressing them with a diascopé a brown stain persisted, indicating a marked cellular infiltration. These lesions suggested a transition between the ordinary folliclis lesions and small foci of *Lupus vulgaris*.

Dr. WHITFIELD said he had these lesions inoculated into guinea-pigs, but had always got negative results. One observer, however, had inoculated a series and got a high percentage of deaths from tuberculosis among the guinea-pigs. He did not think there was any doubt as to their being tuberculous. Apparently the test must be made as soon as the lump appeared in the skin. The same was true of Bazin's disease.

Dr. J. M. H. MACLEOD also showed a case of *favus of the erythematous-squamous type*. The patient was a little girl, aged 5 years, and the favus lesions were present in the form of three patches on the neck. The largest patch was oval in shape and about $1\frac{1}{2}$ inches in its long diameter, was slightly raised, red and scaly. In the centre it was partially involuted, and presented, when first seen, a number of pin-head-sized typical favus scutula. The border was studded with minute, deep-seated vesico-pustules. A baby brother of the patient was also affected, and had a roundish patch of favus of the herpetic type on the abdomen. Cultures were made from the first case on maltose agar, and grew the white downy culture of *Achorion Quinckeanum* of mouse favus.

Dr. STOWERS said that twenty years ago favus was common in London in the East End; he had seen a large number of cases there. It was now very rare, especially in the west of London. Chronic cases occasionally migrated from one hospital to another, giving the impression that the disease was less rare than it is.

Dr. SEQUEIRA said the Favus School, started by the County Council, did much to stamp out the disease in London, and apparently the authorities responsible for the admission of immigrants were now careful to exclude cases of favus. The Favus School had been closed owing to the paucity of patients, but he still occasionally saw cases at the London Hospital.

Dr. G. NORMAN MEACHEN showed a case of *localised sclerodermia (morphæa)*. The patient was a girl, aged 14 years, rather anæmic, who was sent to the Prince of Wales's Hospital by Dr. G. Basil Price. She had had psoriasis eight years previously, and was once said to have had "a slight tendency to chorea." Eighteen months ago the left thumb-nail split without apparent cause, and almost immediately afterwards a white streak was observed upon the back of the terminal phalanx equal in breadth to the radial portion of the split nail. This band spread upwards until, at the time of the meeting, it had extended as far as the base of the first metacarpal. The surface was devoid of hair, and it was notably thickened. The borders also were slightly bluish. There was no history of injury. The mother had suffered from chorea, and she stated that the girl was of "a very nervous disposition."

Dr. SEQUEIRA said he had now under his care a girl of about the same age with a patch in the cleft between the thumb and forefinger; one band went up the forefinger and another along the thumb, a distribution suggestive of the bifurcation of the nerves. There was no history of trauma in this case. He had applied the X-rays through an aluminium filter, and the girl could now move the thumb and finger better than before. He had had no experience of cataphoresis with salicylate ions.

Dr. F. PARKES WEBER said he thought the tendency of localised sclerodermia was spontaneously to leave off spreading after it had existed for a certain time. At present he had a woman under his care in the hospital whom he had seen many years ago with a long stripe of localised sclerodermia on one thigh and with a patch also in the lumbar region. Since that time there had apparently been no extension of the sclerodermia. She was now in the hospital on account of internal cancer. Her present age was forty-four, and according to her account the sclerodermia had not progressed since she was aged about eighteen. It formed a hard, depressed band on the right thigh, extending from a spot between the great trochanter of the femur and the crest of the ilium, passing along below the fold of the groin to the inner anterior aspect of the thigh and down the inner part of the front of the thigh to close above the knee. The isolated lumbar portion constituted a hard, depressed plaque, about the size of a five-shilling-piece, to the right of the vertebral column, between the iliac crest and the lower ribs. This "zoniform" or "zoster-like" sclerodermia (which Sir Jonathan Hutchinson had termed "*Morphæa herpetiformis*") commenced at about the age

of twelve, reached its maximum development in about six years (when the patient was aged eighteen), and since then to the present time had remained stationary, or had undergone involution changes.

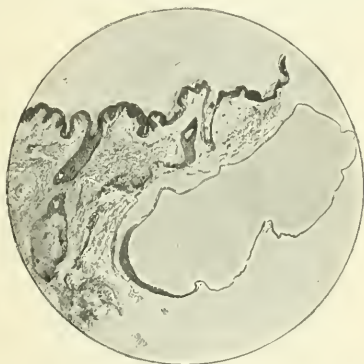
Dr. G. NORMAN MEACHEN also showed a case of *Urticaria pigmentosa*. The patient was a male infant, aged 2 years. The condition first began at the age of two months as a "gum-rash," but the spots never disappeared. At the present time the eruption was profuse, widely distributed over the trunk, face, and scalp, and was mainly of the macular type with a few papules. Some degree of factitious urticaria was present, and the mother stated that some of the lesions were "still coming out." The child had never been vaccinated, as this had been considered detrimental to its health.

Dr. STOWERS said the majority of such severe cases improved in the course of years, but the eruption was essentially of chronic nature, and it was not improbable that the lesions in this instance would persist into adult life. He reminded the Fellows of the valuable paper contributed by the late Dr. Sangster, and published in the Pathological Society's *Transactions*, with illustrations.

Dr. G. NORMAN MEACHEN showed a case for diagnosis. The patient was a man, aged 45 years, a clerk, who had sought advice at the Prince of Wales's Hospital at the end of January of the present year for a "pink discoloration of the roots of the nails" of a fortnight's duration. The redness soon deepened, and the fingers felt sore and itched, after the manner of chilblains. At the same time small red spots appeared upon the back of the terminal phalanx of the left index- and little finger. The fingers were said to "go dead" occasionally and to throb when the hands were held down. The nails were unaffected. Some ulnar deviation was present upon the right side. There was no history of rheumatism or other severe bodily illness. No central atrophy could be detected in the lesions upon the dorsum of the phalanges. At the time of the meeting the condition had improved spontaneously, and the hands were not markedly cold. The pulse was not of high tension.

Dr. J. H. SEQUEIRA showed a case of *Hidradenomes eruptivis* (*syringoma*). The patient was a girl, aged 23 years, who was sent to the London Hospital by Dr. Henderson Baird. She enjoyed good health, and until three years ago had never noticed any abnormality of the skin. The family history was good, and there was no similar eruption in any member.

Three years ago the patient noticed some small "lumps" on the front of the chest. The growths did not itch, nor did they give her any pain. A year ago similar lesions began to appear on the back. Recently a few small growths have appeared on the throat. In the triangle between the mammaræ, and in the epigastrium, and on each side of the chest, and on the back, chiefly in the scapular regions, there were many pale, discrete growths, raised above the surface of the skin, and quite tense and hard to the touch. They varied in size from a pin's head to a lentil-seed, and a few reached the size of a split-pea. Some of the little tumours were yellowish in colour,



To illustrate Dr. Sequeira's Case.

others paler and of the colour of the skin. On the back there were a few almost linear lesions, while on the front of the neck the papules were pinhead-shaped. There was no infiltration about the growths.

A small growth from the back was excised, and Dr. Turnbull made the following report: "The superficial epidermis is of normal thickness and shows normal interpapillary processes. Hair-follicles, one furnished with a sebaceous gland, are present in the dermis. There is one large rounded cystic cavity, and a portion of the wall of a second cavity in the dermis. The wall of these cavities is lined by several layers of stratified epithelium. The inner cells are flattened and slightly eosinophilous; beneath this there are a few polygonal cells and a basal layer. The cells of the basal layer are short,

columnar or cubical. There is no stratum granulosum. The complete cyst lies immediately below the upper extremity of a hair-follicle, and is apparently derived from this hair-follicle or its gland. This origin of the cyst is also indicated by the position of the complete and incomplete cysts relative to the hair-follicle which is furnished with a sebaceous gland."

The case is one of an interesting group to which many names have been applied. The cysts apparently develop from epithelial tubes, but whether these are sweat-ducts or pilo-sebaceous ducts cannot be settled by the sections in this case. Jacquet and Darier's (2) original name

of "Hidradenomes éruptifs" was given on the supposition that the eruption started from the sweat-ducts. On the hypothesis that the eruption is naevoid in character, Gassmann (1) applied the name "Nævi cyst-epitheliomatosi disseminati," which has also been used by Pernet (4) in describing a case. Török (5), McDonagh (3) and others prefer the name "syringoma," which does not commit one to the type of duct from which the cysts arise.

The eruption is evidently the same as that described by Kaposi as Lymphangioma tuberosum multiplex, but it has no relation to the lymphatic system.

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- (2) JACQUET and DARIER.—*Annales de Derm. et de Syph.*, 1887, p. 317.
- (3) McDONAGH.—*Brit. Journ. Derm.*, xxiv, p. 228.
- (4) PERNET.—*Ibid.*, xix, p. 67.
- (5) TÖRÖK.—*Handb. der Hautkrankheiten*, 3te Abtheil, p. 475.

Dr. F. PARKES WEBER showed a drawing of a case of *artificial skin-eruption*. The patient was an unmarried Swiss woman, aged 33 years, a domestic servant in England, who came to the hospital on February 10th, 1913, complaining of a large, irregularly shaped patch of erythema over the back of the left foot. On this patch there were several bullæ, and Dr. Weber understood that the patient had had attacks of a similar skin-eruption previously, as if she were subject to a



To illustrate Dr. Weber's Case.

kind of recurrent "Erythema bullosum." The possibility of artefaction was thought of, but the patient, who seemed normal except for the eruption, had arranged to go back to Switzerland in a few days' time, and as she was apparently anxious that the condition of her foot should not detain her, she seemed unlikely to have produced the eruption herself.

On February 22nd she was admitted under Dr. Weber's care as a case of erysipelas, with a supposed axillary temperature of 103.2° F. The foot had in the meantime nearly healed, but on the upper part

of the front of the left thigh a large, angry-looking patch of erythema had developed, with several bullæ of various sizes over the bright red (and as the exhibitor thought) swollen skin. On February 24th, however, he ascertained that though febrile temperatures continued to be charted, the patient's pulse did not at all correspond to her temperature. With an axillary temperature of over 103° F. the pulse had been charted as 78 per minute, and with a supposed

temperature of 102° F. her pulse was only 68. Since admission her pulse had varied between 68 and 88, and her respiration between 20 and 28 per minute. In the evening the temperature was taken *per rectum*, and was found to be only 99° F. It then became practically certain that the fever had been simulated, and that the eruption, first on the foot and then on the thigh, had been artificially produced in some way by the patient herself. Next morning, when the accompanying drawing (see figure) was made, there was no fever, the bullæ were drying up, and the erythema rapidly fading. The patient was able to leave England for the continent on February 26th, but how she produced the eruption was not ascertained.

MANCHESTER DERMATOLOGICAL SOCIETY.

ORDINARY meeting held Friday, February 28th, 1913, Dr. G. H. LANCASHIRE in the chair.

Dr. R. B. WILD showed (1) a *case for diagnosis*. The patient, a man, aged 32 years, who was a sailor, presented numerous scars on both sides of the neck. The scars were raised, and had a wheal-like appearance, and on examination felt distinctly indurated; the neck was markedly pigmented, and many comedones were to be seen, with one or two pustules. On the patient's back was an eruption, which had all the usual characteristics of an ordinary *Acne vulgaris*.

Dr. Wild suggested that the lesions on the neck were possibly an early stage of *Acne keloid*, "*Dermatitis papillaris capillitii*."

(2) A *case for diagnosis*. The patient, a young adult female, in November, 1911, noticed a small red spot on the outer aspect of her right leg, which was distinctly painful to touch. This spot gradually spread, and eventually broke down, forming a shallow ulcer. Subsequently two other spots similar in character developed on the same leg.

On November 5th, 1912, she was admitted as an in-patient. The two uppermost ulcers were healed, leaving a depressed and purplish scar. After admission a spot, similar in character to those already described, developed on the left leg about four inches above the external malleolus. This spot increased slowly in size, becoming gradually darker in colour, the extending margin having the yellowish appearance of a bruise. It broke down in the centre. At the present time the ulcer has a peculiar worm-eaten appearance, is about the size of a shilling, shallow, and is deeply hæmorrhagic in appearance, and has no surrounding induration.

Three weeks ago another spot appeared, painful and red, and has now formed a small round ulcer.

All these lesions appear to arise deeply, and gradually come to the surface.

Dr. Wild was inclined to look upon the case as one of necrotic purpura, but thought there was a possibility of the ulcerations being tuberculous in character.

Dr. LESLIE ROBERTS thought it was an atypical case of Bazin's disease.

Dr. G. H. LANCASHIRE showed (1) *Dermatitis artefacta* in a woman, aged 45 years. The patient was of a highly neurotic temperament, and had been under treatment since July, 1912, for ulceration of the left leg.

The ulcers were shallow, with sharp crescentic outlines and indurated bases, the surface presenting a worm-eaten appearance with slight purulent discharge. There were one or two foci in the surrounding skin of pustular folliculitis.

Ten days after admission to hospital the ulcerations had completely healed under a simple dressing. Whilst in hospital she had a sudden relapse, large ulcers appearing in twenty-four hours; these ulcerations were of the same type as those already described.

Most of the members agreed with the diagnosis.

(2) An unusual *iodide eruption*. The patient, a young woman who was under treatment for intra-nasal lupus by Pfannenstill's method, developed a symmetrical erythematous rash after taking two 15-gr. doses of sodium iodide.

This eruption appeared as large, swollen and tender plaques of erythema. It was most marked on the palms of the hands, but was also well developed on the arms, trunk and neck.

There were no signs of the more common form of iodide eruption.

(3) *Herpes* in a boy, aged 12 years. He has had repeated attacks on the left side of the face, corresponding in distribution to the superior maxillary division of the fifth nerve.

(4) *Seborrhæic dermatitis* in a young adult female. The eruption, typical in character, was very extensive in distribution, involving practically the whole trunk.

The individual lesions had the characteristic circinate form, and were slightly raised at the margins and showed slight desquamation.

Shown for Dr. SAVATARD, who was unable to be present: (1) *Congenital hyperkeratosis of the palms of hands and soles of the feet*. The mother of the patient, a boy, aged 12 years, gives a history of the condition having persisted since infancy, but says that it has disappeared once or twice.

There was a slight degree of thickening of the skin on the dorsum of both hands and feet.

A brother of this child suffers from xerodermia.

(2) *Epithelioma developing on lupus scar* in a man, aged 48 years, who had been treated eight years previously for *Lupus vulgaris*. At that time a papillomatous growth was removed from the left cheek, and this was pronounced not to be malignant.

In 1908 the papilloma recurred, was excised, and again pronounced to be benign in character.

Two years ago an ulcer appeared beneath the left eyelid, which extended slowly. The patient was treated at a neighbouring hospital with X-rays, but in spite of treatment the ulcer commenced to spread rapidly. At the present date the ulcer is very extensive, measuring some 3 in. by 2 in., with raised and indurated edges, and the orbit is extensively invaded.

Since admission he has had five X-ray sittings on consecutive days, each sitting equal to three pastille doses filtered through 2 mm. of aluminium. The lower margin of the growth shows some improvement, and after a rest it is proposed to resume treatment with X-rays.

REVIEWS.

ELECTRO-THERAPEUTICS FOR PRACTITIONERS.*

THIS small volume is composed of essays on some useful forms of electrical apparatus and on some diseases which are amenable to electrical treatment. Although not intended as a text-book on electro-therapeutics, it nevertheless contains some very useful information on the subject of electro-therapy, and can hardly fail to be of practical service to many practitioners. It is brightly written and well illustrated, and covers a wide range of diseases in which the author has found electro-therapy of benefit to the patient. On turning to the subject of skin-diseases, it is found that the subject of ringworm treatment is dealt with in detail, as are also such diseases as rodent ulcer, hypertrichosis, and keloid. The treatment of pruritus is not discussed at length, and the author does not appear to have found any one method of electro-therapeutical treatment universally successful. This is also the experience, it need hardly be said, of dermatologists.

One of the most attractive chapters is on lessons from failures—"On *apprendre en faillant*." Failures have occurred, and doubtless will occur again so long as

* *Electro-therapeutics for Practitioners*. By F. H. HUMPHRIS. London: Edward Arnold, 1913. Pp. 234. Price 8s. 6d. net.

infallibility remains unconferred on us from mistaken diagnosis. Sometimes the cause of failure is over-confidence, sometimes even more disastrously from want of confidence. But one of the most frequent causes is the treatment by electricity of cases which are entirely unsuitable. Chronic constipation due to a badly retroverted uterus can hardly be expected to be cured by high-frequency, X-rays, or the Bergonié method, even if anyone were daring enough to attempt treatment by these two latter methods. But there is an interesting account of the treatment of obesity by the Bergonié method, and this method appears to produce excellent results in suitable cases.

In conclusion, we can recommend this as an eminently readable book, which should appeal to a large number of medical practitioners, and be of practical value to them.

J. L. BUNCH.

DISEASES OF THE MOUTH, SYPHILIS, AND SIMILAR DISEASES.*

THIS book brings together in an admirable form clinical material, which, as the author rightly points out, is, as a rule, very much scattered, being under observation in the clinics of laryngology, surgery, medicine, and dentistry, as well as in that of dermatology. The feature of the work is the reproduction in colour of moulages of diseases of the mouth. The fifty-two plates are excellent, both as clinical illustrations and works of art, and are reproduced with the accuracy of colour which the publishers of the Jacobi-Pringle atlas have led us to expect. The work is of the highest importance to the dermatologist, for it contains a series of representations for which we know no parallel. The plates represent various forms of acquired and congenital syphilis, diseases of the mouth, mercurial stomatitis, the buccal eruptions of Lichen planus, Erythema multiforme, herpes, and many other conditions of interest. The tuberculous lesions are admirably reproduced, and a series of photographs of the teeth of heredo-syphilis complete the work.

The letterpress is succinct and quite adequate to the complete understanding of the illustrations. We can cordially recommend the work to our dermatologist colleagues as an admirable companion volume to the Jacobi atlas.

J. H. SEQUEIRA.

* *Diseases of the Mouth, Syphilis, and Similar Diseases.* By Prof. Dr. F. ZINSSER. Translated and edited by JOHN BETHUNE STEIN, M.D. With 52 coloured and 21 black and white illustrations. London: Rebman, Ltd. Price £1 10s. net.

THE BRITISH JOURNAL OF DERMATOLOGY. MAY, 1913.

EPITHELIOMA AND RODENT ULCER OCCURRING IN THE SAME PATIENT.

By HALDIN DAVIS, F.R.C.S., M.R.C.P.

It is extremely rare to find simultaneously on the same patient two new growths, both malignant but of different types. In the case which is now about to be described there were co-existing (1) a growth on the sole of the right foot, which under the microscope showed all the characteristics of a rodent ulcer, while (2) on the back of the right thigh there was a button-shaped ulcerating disc which was undoubtedly an epithelioma. The patient, a man, aged 56 years, was first seen in September, 1911. He complained of a sore on the inner margin of the sole of the right foot which had been present for fifteen months. It was about the size of a sixpence, ulcerated, and the edges of the ulcer were not heaped up or raised, nor were they especially hard. On the other hand, the ulcer did not have the characteristics of a gummatous ulcer, and it is almost inconceivable that a gummatous ulcer should remain of so small a size over so long a time. It would either spread or heal up. Really no diagnosis was made—in fact it was suspected that the ulcer was an artefact—but the lesion was treated empirically, first with mercuric and salicylic plasters, subsequently with X-rays. It never healed up properly but it scabbed over, did not increase in size, and the patient was able to walk about comfortably when he protected it by means of a circular bunion plaster. In July, 1912, however, a small raised disc appeared on the middle of the back of the right thigh. This, too, was X-rayed, and at first improved, but subsequently began to increase in size and also ulcerated. It was hard and tough on palpation. There was no

glandular enlargement. Finally in December, 1912, when it had become approximately three quarters of an inch across, it was excised freely under local anæsthesia. On microscopical examination it proved to be an epithelioma. When it was found that the growth on the thigh was an epithelioma it became clearly desirable in the interest of the patient that the ulcer on the foot should also be removed. It was excised in January of the present year, and much to my surprise revealed under the microscope the structure of a rodent ulcer. Two points of interest may here be noted: in the first place the sole of the foot is a most unusual situation for a rodent ulcer, and secondly, it is an extraordinary thing to find a rodent ulcer and an epithelioma co-existent on the same limb. In looking through the literature of the subject I can find very few similar cases. Multiple malignant growths are not common, but a good many examples have been recorded of multiple rodent ulcers and of benign cystic epitheliomata. Two cases only, however, have been published of malignant growths of different varieties occurring simultaneously on the skin of the same patient. The first of these was published by Sir George Beatson in the *Brit. Med. Journ.* 1899, vol. ii, p. 1602. His patient, a worker in tar, exhibited three varieties of skin-tumour. He had (1) a warty tumour of five years' duration on his left hand situated over the base of the fifth metacarpal bone; (2) a rodent ulcer of ten years' duration near the inner canthus of the right eye; (3) an epithelioma on the right hand at the stump of the index finger. This finger had been removed for epithelioma five years previously by another surgeon. The other case was published by Dr. A. D. Fordyce in the *Journal of the American Medical Association of Chicago*, vol. li (1908), p. 1405. His patient had a typical rodent ulcer on the temple and also an epithelioma on the bridge of the nose. The epithelioma ultimately caused the death of the patient by glandular metastasis.

Dr. McCORMAC in a paper on rodent ulcer in the *Archives of the Middlesex Hospital* (Cancer Research), vol. xix, p. 172, refers to two somewhat similar cases previously published by Lazarus-Barlow and Campanile, of women who had rodent ulcer of the face at the same time as they had spheroidal-celled carcinoma of the breast, but these two cases do not fall into quite the same category as the case here described as one of the malignant growths was not a skin-tumour.



Section of Epithelioma from thigh.
TO ILLUSTRATE MR HALDIN DAVIS'S



Section of Rodent Ulcer from sole of foot.
ARTICLE ON EPITHELIOMA AND RODENT ULCER OCCURRING IN
THE SAME PATIENT.



But in the same paper McCormac also published the results of the histological examination of sixteen cases of advanced rodent ulcer, and in three of them he found microscopic evidence of the presence of epithelioma in the growth—that is to say, while in the ordinary rodent ulcer the malignant cells are derived solely from the basal layer of the epidermis, in these three he also found malignant cells derived from the prickle-cells or Malpighian layer. In one case superficially he found ordinary rodent ulcer, but more deeply typical prickle-celled or Malpighian growth. As a result of his researches McCormac is of opinion that there is only one form of cancer of the skin, but that it grows slowly or more quickly according as it assumes the rodent or prickle-celled (or Malpighian) type. Hence it becomes quite comprehensible, although unusual, that if two malignant tumours of the skin arise in the same individual, one, the slower to develop, should exhibit the structure of a rodent ulcer, while the other, the more quickly growing, should display the characteristics of an epithelioma. I am indebted to Dr. Adamson for permission to publish this case.

CLINICAL NOTE.

MULTIPLE PIGMENTED WARTS IN PREGNANCY.

By E. WARD, M.D.CAMB., F.R.C.S.ENG.

MRS. M—, a healthy brunette, aged 32 years, became pregnant for the first time about nine years ago. In the later months of pregnancy crops of pigmented warts appeared on the body, neck and limbs, causing the patient much annoyance. When the pregnancy was over a few of these warts dropped off, but the majority remained.

Four years ago the patient became pregnant again, and after five months had passed, fresh crops of pigmented warts began to appear. I saw her at this time, and found a number of firm, flat-topped, black elevations on the skin, which might justly be described as black warts. These were scattered over the body and limbs, most thickly distributed on the neck, and avoiding the face and hands. In size they varied from a pin's head to a large pea, and they were oval or round in shape.

After the child was born the warts remained. I could give but little hope of a cure by medical means so the patient consulted a quack, who, with an ingenuity greater than mine, ordered her his corn cure. This seemed to be a salicylic collodion, and some of the growths did appear to be shed under this treatment, while others became less pigmented. Most of the growths, however, were unaffected, and the patient had them when last seen in May, 1912, in undiminished numbers, three years after the confinement.

I know of no parallel case to this that has been published, though Kaposi at the Berlin Congress described a case in which a pigmented mole became black during pregnancy. In my case the growths were new and appeared black from the first. If the case ever comes to my notice again I shall try the effect of small doses of X-rays on the warts.

A CASE OF MULTIPLE TELANGIECTASES.

By J. H. SEQUEIRA, M.D., F.R.C.P.

THE patient, a married woman, aged 55 years, was admitted to the London Hospital on April 14th, 1913. During the past five or six years red spots have appeared upon the face and fingers, and occasionally there has been hæmorrhage from some of the spots. She has six children alive and in good health, and one of her daughters suffers from occasional epistaxis. No other relative has had any similar affection. The patient has usually enjoyed good health. Fourteen years ago she had bronchitis and was anæmic for some months. The catamenia ceased ten years ago; before that the periods were regular, but the loss was excessive. The patient has also suffered from varicose veins for the past ten years. There was no evidence of syphilis.

On April 4th the patient first came to the receiving room at the hospital because a spot on her left index finger started bleeding and she was unable to control the hæmorrhage. This bleeding recurred several times, and on April 14th she was admitted into the ward. On admission there were many telangiectases on both cheeks. The dilated vessels were not grouped in any particular pattern. In addition to the telangiectases there were many punctate red spots on the cheeks,

chin, and left eyebrow. On the dorsal aspects of the fingers and thumbs of both hands and also on the palmar surface of the fingers there were numerous punctate lesions of similar character. The largest of these were slightly raised above the surface of the surrounding skin and the size of a large pin's head. On the tongue and the mucous membrane of the lower lip, and also on the hard palate, there were numerous punctate lesions, and a large telangiectatic vessel was present upon the uvula. The naso-pharynx so far as it could be observed with the laryngoscope and the interior of the larynx were normal in appearance. On the lower internal surface of the left labium majus there was a telangiectatic vessel rather suggestive of a spider naevus. About the anus there were several external piles.

There was no definite history of melæna. Nearly every morning for several years the patient had suffered from slight bleeding from the nose. The spots on the left index finger had bled spontaneously several times during the last three or four years, and also some lesions on the right index and little fingers, but the hæmorrhage had always ceased on previous occasions on the parts being bound up. She also stated that there had been slight bleeding from the tongue occasionally.

The patient was somewhat stout and anæmic. The heart's apex was not palpable, but the heart's sounds were best heard in the fifth left intercostal space just outside the nipple line. At this spot a systolic hæmic murmur followed the first sound. The pulse was regular, 72 per minute. The blood-pressure, measured by the Riva-Rocci apparatus, measured 180 mm. The lungs showed no abnormality beyond a moderate degree of emphysema with a little bronchitis. The abdomen was large and flaccid; the edge of the liver and spleen were not palpable. The area of hepatic dulness did not extend below the costal margin. There was no ascites, and the legs did not pit on pressure. The subcutaneous veins of the chest and abdominal wall were rather well marked, there was no grouping of vessels about the umbilicus, but in the middle line of the back just above the level of the scapular spines there was a fan-shaped arrangement of dilated superficial vessels. The subcutaneous vessels round the ankles and on the dorsum of the feet were also well marked. The urine was acid, specific gravity 1025; there was neither albumen nor sugar present. The coagulation-time of the blood was three minutes. A blood-count gave the following figures: Red corpuscles, 4,300,000

per cubic millimetre; hæmoglobin, 50 per cent.; colour-index 0·6; white corpuscles, 5000 per cubic millimetre; polynuclear neutrophiles, 55 per cent.; eosinophiles, 0·5; small lymphocytes, 15·5; large lymphocytes, 19; large hyaline, 9; granular basophiles, 1. On ophthalmoscopic examination the retinal vessels were found to be thickened, but there were no hæmorrhages.

[Dr. Sequeira is much indebted to Dr. W. J. Oliver for his assistance in working out the details of the case.]

The ætiology of this type of multiple telangiectases is obscure. Colcott Fox, in a careful study of the conditions which lead to these dilatations of the peripheral vessels (1), showed that multiple telangiectases could be separated into the following groups:

(1) Nævi, including the stellate nævi and probably Hutchinson's infective angioma.

(2) Telangiectases associated with various dermatoses, *e.g.* Acne rosacea, Lupus erythematosus, localised sclerodermia, and after repeated applications of the X-rays. He adds to this group Adenoma sebaceum, which I should include in the group of nævi, and Xerodermia pigmentosa, which, though of congenital origin, has relations with chronic X-ray dermatitis.

(3) Telangiectases symptomatic of disturbances of the circulation, either of cardiac origin or associated with diseases of the lungs, liver and spleen. In this group come the cases occurring in Graves's disease, of which Nevins Hyde described characteristic examples (2).

(4) Essential or primary telangiectases, *i.e.* those not depending directly upon the state of the circulatory system or upon any well-defined dermatosis. This group is an extensive one, and many conditions are described. Fox quotes Lanceplaine's division of these cases according to the patterning of the vascular dilatations (3), *viz.* as diffuse or in network, and in plaques. To Lanceplaine's groups Fox adds angiomata of the senile, the common lesions seen on the trunk in a large number of people between forty and fifty, especially men.

As a special and interesting variety of the essential telangiectases there is the familial affection to which Sir William Osler called attention (4), and of which Parkes Weber (5) collected all the published cases. The characters of this type are the familial tendency to recurrent epistaxis and multiple telangiectases of the skin and mucous membranes.

After a review of the cases of primary telangiectases, I find that with the exception of the familial group the term "essential or primary" is rarely applicable. In most of the recorded cases there is some underlying condition which, at any rate in part, accounts for the tendency to dilatation of the peripheral vessels; of these arterio-sclerosis and syphilis are the most frequent. Varicose veins are also almost a constant phenomenon.

Lanceplaine's second case, a woman, aged 66 years, suffered from arterio-sclerosis and ocular and reflex troubles. Gaston (6) described the case of a male patient, aged 45 years, a syphilitic with intermittent pulse and impaired second sound of the heart. Brocq (7) mentioned the case of an obese woman whose telangiectases began after the menopause; she was a syphilitic, and had suffered for years from intermittent hepatic colic, pelvic abscess and influenzal pneumonia. Levi and Delherme (8) also describe the case of an obese woman, aged 33 years, who suffered from myocarditis and slight chronic nephritis. Morny and Malloziel's male patient, aged 47 years, was the subject of chronic lead poisoning (9). Erasmus Wilson mentioned the case of a chronic alcoholic aged 30 years (10).

The case now described agrees in several particulars with those mentioned; the obesity of the patient, her anæmia, high blood-pressure and the evidence of the thickening of the retinal vessels suggested chronic interstitial nephritis. Hypothetically there would be two factors involved in the causation of the permanent dilatation of the capillaries, viz. the high blood-pressure and some obscure change in the vessel walls, probably of toxic origin. The difficulty in restraining the hæmorrhage in this instance and in certain others which have been described might be due either to a blood change unrecognisable by the usual methods of examination, for in this instance the coagulability time was not abnormal, or to such alteration in the vessel walls as would prevent contraction. In connection with the possibility of toxic damage to the vessel walls, the interesting group of cases described by Dr. Fearnside (11) occurring in children suffering from wasting and protracted diarrhoea is worthy of consideration.

In the character of the lesions the case now described resembled closely the manifestations seen in the familial type, but there was no history of heredity, though one of the patient's children suffered from epistaxis.

There was no evidence of malignant disease, which is mentioned as being associated with the formation of telangiectases. In cancer the lesions are said to be of the senile angioma type, but there is little evidence in support of this, and as these angiomata are a frequent phenomenon in people of both sexes over fifty, it is not unlikely that they would be rather frequent in the subjects of malignant disease, which is more common in persons of advancing years. Levi and Lenoble, however, describe a case of extensive telangiectases in a woman, aged 70 years, with cancer of the breast (12).

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ROYAL SOCIETY OF MEDICINE.

DERMATOLOGICAL SECTION.

MEETING held on Thursday, April 17th, 1913, Sir MALCOLM MORRIS, K.C.V.O., President of the Section, in the Chair.

Dr. H. G. ADAMSON showed a case of *congenital hyperkeratosis of the hands and feet*. The patient was a female infant, aged 4 months. The hands and feet had the appearance of being clothed in black gloves and socks, due to a thickening of the horny epidermis of the palms and soles and backs of the hands and feet. The epidermis was almost black. It formed a sort of dry, wrinkled, leather-like coating, which was fissured and separated in parts to expose the smooth, pinkish skin beneath. There was no verrucose appearance. There were similar patches at the tip of each elbow,

but no moles or other "birth-marks" elsewhere. The mother attributed the condition to a fright during pregnancy by a dog with "horrible black paws," but she admitted that when the child was born the hands and feet were sodden and white, and only became black some weeks later. There were no other cases in the family.

Dr. ADAMSON thought that the condition could be improved, and the hands and feet kept tolerably smooth by the application of salicylic acid ointment and occasional soaking in warm water. In accordance with the President's suggestion, he would add a little sulphur to the salicylic acid.

Dr. PERNET pointed out that there was a reference to a case of the kind in White's *History of Selborne*, the subject being a boy. It was referred to as a leprosy by Gilbert White.

Dr. HALDIN DAVIS showed a case of *neurotic excoriations*. The patient, a domestic servant ("mother's help"), aged 25 years, exhibited on the face and the backs of the hands typical "neurotic excoriations"; shallow, angular abrasions and sores, more or less parallel with one another, while in some places were areas of erythema obviously caused by rubbing and scratching with the finger-nail. About a month previously she had a similar attack, which had cleared up entirely on the patient going for a holiday. An interesting point in this case was the relation which it bore to the working of the National Insurance Act. Although the patient only received 7s. 6d. a week sick benefit, nevertheless the exhibitor considered that this sum very likely weighed with her if she desired to have a holiday. The receipt of this sum would certainly enable her to minimise her expenses.

Dr. SEQUEIRA said he had recently seen in conjunction with Dr. Mackwood a young woman, a domestic servant, who had several times developed an eruption on the face and forearms. When he first saw the patient there was no doubt, from the character and especially from the outline of the lesions, that the disease had been self-produced. After taking the case into a Cottage Hospital to watch the patient, and getting the matron to examine her clothing, Dr. Mackwood elicited a confession that the irritant used was mustard. The girl was an insured person, and, as she was also a member of a club, she drew 19s. 6d. a week when she was sick, and her wages as a domestic were £22 a year. There was no prosecution in this case, but the patient did not get her insurance money.

The PRESIDENT (Sir MALCOLM MORRIS, K.C.V.O.) remarked that it was often difficult to know what to say in such cases, especially in private—i. e. how far to go in declaring what it was due to.

Dr. GRAHAM LITTLE took this opportunity of mentioning that the Loy he had shown two meetings ago with ulceration of the left leg which it had been suggested was due to artefact had completely recovered under treatment with simple

occlusive dressings, so that the father said that for four years the leg had not been so well as at present. The boy had been under careful observation in the wards at St. Mary's Hospital; no attempt had been made by him to dislodge the bandages, which had been marked so as to divulge any such attempt had it been made.

Dr. HALDIN DAVIS also showed a case of *Mycosis fungoides*. The patient, a woman, aged 56 years, had suffered from a universal scaly dermatitis for about two and a half years. The whole surface of the body was implicated, including the scalp, which had become almost totally bald. The nutrition of the nails was also disturbed, with the result that they had become brittle and fibrillated. The patient complained of a certain amount of pruritus, but this had never been particularly intense. In addition to the dermatitis the skin on the face presented a peculiar soft infiltration, darker in colour than the rest of the body. This infiltration began on the left side of the face, but had within the last few months extended to the right side. It was not general, but formed a sort of festooned pattern on the cheeks and also behind the ears. There was also an infiltrated patch on the right calf, and there was beginning at the time of exhibition a patch on the right upper arm. The mucous membranes presented no abnormality. The exhibitor regarded the case as one of *Mycosis fungoides* just passing from the pre-mycotic stage into the mycotic stage of the disease.

Dr. PERNET considered the case was one of *Mycosis fungoides*. The woman was on the road to a "femme rouge."

Dr. GRAHAM LITTLE suggested the diagnosis of *Parakeratosis variegata*. The blotchy eruption on the abdomen most nearly resembled that disease. The eruption on the face, which was clinically of a totally different character, was probably of different causation.

Dr. MACLEOD thought the face condition suggested a syphilide, and considered it possible that the affection on the face belonged to a different category from that on the body.

Dr. ADAMSON was inclined to regard the case as *Mycosis fungoides*, but thought that *Lupus erythematosus* ought to be considered. The lesions on the face were very like *Lupus erythematosus* in their character and distribution, and the loss of hair would fit in with acute *Lupus erythematosus*, transient alopecia without scarring being a not uncommon occurrence in acute *Lupus erythematosus*.

Dr. PRINGLE said Dr. Adamson's suggestion was at the back of his own mind: it seemed compatible with generalised *Lupus erythematosus*. Possibly that disease and syphilis co-existed in the patient.

Dr. A. M. H. GRAY showed a case of *persistent erythematous eruption*. The patient was a woman, aged 37 years, who was in good

health till nine months ago. At the age of thirteen she had rheumatic fever. She had seven brothers and sisters, three of whom in addition to herself had had rheumatic fever. She had had two children, of whom one was alive and well; the other had died of diarrhœa in infancy; no miscarriages. The present illness commenced nine months ago with two small blisters on the outer side of the left ankle; these spread and formed patches on the outer side of the foot and gradually extended on to the front of the shin. Similar patches appeared one on the front of each knee and one on each elbow about the same time; a little later the outer side of the right foot and front of the right ankle became similarly affected; six months ago patches appeared on the back of the left hand and wrist and on the calves, and three months ago on the back of the right hand. Quite recently, about a week ago, small spots had begun to appear on the backs of the forearms and arms, front of the legs and outer side of the thighs. The patches were painful and varied from day to day, though they had never disappeared.

The patient had been in hospital two days and the lesions had somewhat subsided, but when seen two days ago they had the following appearance: The newest lesions, seen on the backs of the arms, forearms, front of the shins and outer side of the thighs, were lentil- to pea-sized perifollicular papules of whitish-yellow colour, tender to the touch; in other situations the lesions were larger, attaining the size of a threepenny-piece and becoming surrounded by an inflammatory zone; some of them retained their white urticarial appearance, while in others, notably those on the calves, hæmorrhage had occurred and a few had developed bullæ. The inflammatory zone around the lesions on the calves was very wide and purpuric in character, and one of the lesions had been converted into a septic ulcer. The largest lesions, seen best on the front of the left ankle and shin, had been converted into rings with a hard raised border not more than 0.5 cm. thick, often incomplete, of an ivory white colour, surrounded by an inflammatory zone and enclosing a smooth deeply pigmented area. The patches at points of pressure—*e.g.* over the knees, elbows, and heels—had developed into warty growths not unlike those seen in *Lupus verrucosus*. The lesions were tender to the touch. There was no scarring. The palms, soles, face and trunk had completely escaped, also the flexor aspects of the limbs

with the exception of the calves. The patient was pale, but otherwise her general condition was good. Her teeth were in bad condition, and she had pyorrhœa. Urine normal. Periods regular; no vaginal discharge. Wassermann and von Pirquet's reactions were negative. The patient had taken no drugs previous to the appearance of the eruption, but during the last month had been treated with mercury and potassium iodide on the supposition that the lesions were syphilitic. A biopsy had been made on the previous day, but a section had not yet been prepared.

The exhibitor had not been able to group the case, but thought that it most nearly resembled those cases recently described by Favera and Piccardi, who had grouped their cases with Crocker's "Erythema elevatum diutinum"; the pictures, however, of Crocker's and Bury's cases did not resemble the present case very closely.

Dr. ADAMSON considered it to be Erythema multiforme on account of the distribution and general appearance. It was much like a case shown by Dr. Graham Little, in which the point was discussed whether it was extensive Lupus erythematosus or Erythema iris.* The fact that it got worse when potassium iodide was given was in accordance with the view expressed at a recent meeting by Dr. Pringle that iodide of potassium did harm in such cases.

Dr. PRINGLE favoured the diagnosis of Erythema multiforme, and pointed out that the preliminary stage of pallor and vascular spasm had been observed.

Dr. PERNET pointed out the Erythema iris type of some of the lesions on the back of the hands.

Dr. A. M. H. GRAY also showed *erythematous lesions of the hands in a case of Lupus vulgaris*. The patient, a man, aged 46 years, had suffered from tuberculous abscesses in the neck from the age of six to sixteen. In March, 1910, he developed Lupus vulgaris of the nose, which was treated in the first instance with old tuberculin, but as he developed cough and signs in the chest this was discontinued and X-ray treatment was adopted. He was well for about a year, but at the beginning of 1912 the disease recurred, and he did not get advice till November of that year when the disease had advanced considerably. Since that date X-rays and local caustic applications had been used, and he had been taking cod-liver oil internally but no other drugs. In March, 1913, his hands became painful, and numerous, tender, lentil-sized papules, slightly indurated, appeared on the fingers of both

* *Brit. Journ. Derm.*, March, 1912, p. 119, and July, 1912, p. 270.

hands. These disappeared in about a month without ulceration, vesiculation or scarring. About a fortnight ago another crop of similar lesions appeared. The patient stated that he had had a similar attack when aged ten. He had also had rheumatic fever when aged thirteen, but had no endocarditis.

The exhibitor considered the lesions to be tuberculides when they first appeared, but owing to the absence of ulceration and scarring he had come to the conclusion that they were of the nature of a toxic erythema. Microscopic section showed considerable oedema and leucocytic infiltration into the lower part of the prickle-cell layer and papillary layer of the corium, and also to a less degree around the deeper vessels and coil glands.

Dr. A. M. H. GRAY showed a case of *rodent ulcer treated with arsenic paste*. The patient was a man, aged 38 years, who had suffered from a rodent ulcer for eighteen years. It began as a pimple over the left zygoma and spread gradually downwards. He neglected it for several years, but some six years ago he was treated by the late Dr. Crocker with X-rays and thorium ionisation and the ulcer healed, but subsequently recurred. He was then again treated with X-rays, but without success, and subsequently underwent treatment at the Radium Institute for nine months, and though the ulcer did not spread, it refused to heal. When first seen by the exhibitor in July, 1912, the ulcer extended upwards to a line drawn from the eyebrow to the top of the ear; downwards to the ramus of the jaw; in front to the margin of the orbit and a line drawn straight downwards to the ramus of the jaw; and behind to the mastoid process. The tragus and lobule of the ear had been destroyed and the meatus opened up. The base of the ulcer was covered by a dirty slough and the malar bone and zygoma were exposed. Under an anæsthetic the ulcer was scraped and arsenic paste applied; a second application was made ten days later. After both these applications there was a tendency for the ulceration to extend, so dressings of 2 per cent. formalin were subsequently used, alternated with starch poultices whenever a thick slough formed. Under this treatment further spread ceased and healthy granulations appeared; subsequently a sequestrum consisting of the outer table of the malar bone and the whole thickness of the zygoma separated; the ulcer was Thiersch grafted and healed well.

Unfortunately a small nodule has since appeared just beyond the original ulcer in the eyebrow: this has been treated with radium.

The case is of interest, firstly because the patient was only aged twenty when the ulcer first appeared; secondly, it shows, as Dr. Norman Walker has pointed out, that the old method of caustic applications is still useful in refractory cases; and thirdly, that good cosmetic results can be obtained in these cases.

The PRESIDENT said that when he was in Vienna the paste was the systematic treatment for chronic ulcerations of various kinds. In the great majority of cases the result was extraordinarily satisfactory, the chief drawback being the intense pain.

Dr. E. G. GRAHAM LITTLE showed a *case for diagnosis*. The patient was an elderly woman under the care of Mr. Warren Low for an ulcer on the cheek, which was almost certainly a rodent ulcer. It had come out on the site of a deep cut from an accident to the cheek six years ago, and had never completely healed. But in addition to this lesion there were a very large number of circular scars chiefly distributed on the dorsum of the feet, the legs, the back of the hands, and the forearms; one or two lesions were present on the abdomen. The history given was that about four years ago there had been a series of scabbed sores in the position of the present scars; these had come out successively and slowly healed. The Wassermann reaction had been taken twice, and each time with a negative result. It was, of course, exceedingly difficult to make a retrospective diagnosis, and the case had been brought up with the view of hearing suggestions.

Dr. E. G. GRAHAM LITTLE also showed a case of *multiple "cold" subcutaneous abscesses in a female infant aged 11 months*. The father of the child was now invalided at home with pulmonary tuberculosis. These swellings were tense and deep-seated, and on incision a thick but fluid pus was evacuated. For the most part the skin over the tumours was normal, but in exceptional instances there was some blueness or redness. They were very numerous and distributed on the dorsum of the left hand (where was the largest tumour, the size of a small plover's egg), on the face near the right eye, on the buttocks, legs, abdomen, and trunk. Some pus from one of the tumours had been aspirated with a sterile needle and planted on Sabouraud's media with a view to testing the possibility of sporotrichosis being respon-

sible for the swellings, but fourteen days had elapsed without growth on this medium. The case was of a type which is usually described as "tuberculous gummata," but on insufficient grounds. Untreated, the tumours remained indefinitely without absorption and without evacuation, the skin usually remaining unbroken over them.

Dr. E. G. GRAHAM LITTLE showed a case of *Lichen planus*. The patient was a man, a medical agent who was familiar with medical terms, and who gave a very positive statement that twenty-one years ago he was under Dr. Radcliffe Crocker's care, and that Dr. Crocker had then diagnosed psoriasis. The patient thought the present eruption resembled the earlier one in appearance and distribution. He had been free in the interval of any skin-eruption until a few weeks ago, when the present condition had developed. He had now quite typical *Lichen planus* of the trunk, limbs and mucous membrane of the month. The distribution was rather in the psoriasis area—the back of the elbow and part of the knee being especially involved, but there was no doubt now of the diagnosis of *Lichen planus*. If, as seemed probable, the earlier disease had been psoriasis, it was interesting that there had been apparently complete cessation of that disease, and that a totally different disease should have developed in much the same area as had been previously affected.

Dr. STOWERS pointed out that the patient's statement that the late Dr. Crocker had had a coloured drawing made of the interior of the mouth when he saw the patient might be taken as presumptive evidence that he regarded the case as one of *Lichen planus* and not psoriasis.

Dr. PRINGLE thought it quite possible that the man had psoriasis twenty years ago, but he undoubtedly now had *Lichen planus*. He had certainly seen some examples of the co-existence of the two diseases in the same individual. One such case he had had under observation for twenty years, in which the psoriasis element prevailed at times, the lichen element at others. It has been seen by the late Dr. Radcliffe Crocker, who called it "lichen-psoriasis."

Dr. J. M. H. MACLEOD showed a *fully grown culture of Achiorion Quinckeianum*, from the case of erythemato-squamous favus he exhibited at the previous meeting of the Section (*Brit. Journ. Derm.*, xxiv, p. 138).

Dr. A. D. HEATH said he had had two examples of *Favus Quinckeianum*. One was on the abdominal wall of a child aged between three and four. In both cases there was a patch of an erythemato-squamous eruption, and one or two very small yellow cups could be seen on each patch.

Dr. G. NORMAN MEACHEN showed a case for diagnosis. The patient was a rather pale girl, aged 14 years. With the exception of an attack of chorea at the age of four, when she attended the Great Ormond Street Hospital, she has had no other illness. The mother states that six years ago a "small pimple came by itself" in the centre of the right calf of the leg. This has never gone away, but has slowly spread and has remained raised above the surface of the skin. She was only seen by the exhibitor on April 16th, at the Prince of Wales's Hospital, when she presented a lesion the size of a two-shilling-piece in the middle of the calf, bluish-red, elevated above the surface, and firm in consistence. Surrounding this was a large area of eczematous dermatitis, the result, the mother said, of a kick from a boy three weeks previously. She also showed the remains of a catarrhal herpes upon the left upper lip. Two teeth were badly decayed, and the thyroid gland was distinctly full. Her parents, four brothers and four sisters were all healthy. There was no history of tuberculosis in the family, nor of any abrasion of the surface at the site of the lesion.

Dr. A. D. HEATH said he regarded it as a granuloma, probably of streptococcal or staphylococcal origin.

Dr. PRINGLE thought that the condition was probably a pus-infection, but suggested that the result of treatment would help in arriving at the diagnosis.

Dr. SEQUEIRA showed a married woman, aged 55 years, suffering from multiple telangiectases. The lesions had appeared during the past five years and were widely distributed. The case is described in full at page 154.

Dr. PRINGLE said he had seen one case of this kind in which multiple telangiectases of the skin were associated with a large dilated blood-vessel on the epiglottis, which caused repeated and very severe hæmoptyses. Her lungs were many times examined, under the idea that she had phthisis.

Dr. F. PARKES WEBER said that some time ago he described a family group of these cases.* In the patient now shown by Dr. Sequeira there were red points of telangiectasis under one finger-nail, and that was a characteristic feature of this type of case. He did not believe the cause of the condition was known, but kidney disease and arterio-sclerosis might in some cases act as predisposing conditions. This woman had not the prominent "stigmata" of the "nævus

* F. P. Weber, "Multiple Hereditary Developmental Angiomata (Telangiectases) of the Skin and Mucous Membranes associated with Recurring Hæmorrhages," *Lancet*, 1907, ii, p. 160.

araneus" or "spider-angioma" class, which some of the patients had, especially on their faces. Patients with cirrhosis of the liver sometimes presented similar and still more striking spider-angiomata (especially on their faces and hands), in which distinct arterial pulsation could be felt; but such hepatic cirrhosis cases should be distinguished from cases like the one under discussion. Calcium therapy had been tried by Sir William Osler in certain of his cases of bleeding telangiectases.

Dr. J. H. SEQUEIRA also showed a case of *multiple subcutaneous abscesses in a young girl*. The patient was brought to the meeting as a case for diagnosis. She was aged 17 years, and was engaged in a pickle factory. Her occupation necessitated her standing the greater part of the day. She had never been out of England, and only once out of London for a fortnight in Gloucestershire. The family history was negative. The patient complained of being easily tired and short of breath. The bowels were usually confined and she had to take salts frequently. The catamenia had been regular up to December, 1912, when she first noticed any trouble with her legs.

The patient was admitted to the London Hospital on January 31st, 1913. Three weeks before Christmas a "red lump" appeared on the right calf. This was very sore and tender. A little later another bluish swelling appeared on the same leg. On January 23rd she attended in the Surgical Out-patient Department, where two abscesses were opened, and a considerable quantity of pus was removed. She was then transferred to the Skin-Department and admitted to the ward. On admission the patient was rather anæmic, but there were no indications of visceral disease. The lymphatic glands appeared to be normal. On the right leg there was a deep ulcer over the middle of the tibia; this was about the size of a sixpence and was surrounded by a red infiltration. On the calf there was a large ulcer the size of a two-shilling-piece, over half an inch deep, and with a shelving border. The ulcers were painful and tender. A thin pus exuded from the ulcers. These were the lesions which had been opened. On the calf of the leg and just above the knee behind there were four red hyperæmic swellings varying in size from a florin to a sixpenny-piece. These were very painful and did not appear to be breaking down. On the left leg there were two ulcerated lesions which have broken down spontaneously; they were about the size of a shilling. There were also some smaller indurated swellings in the calf and on the inner side of the thigh.

The patient was kept at rest in bed, and was put on a generous diet. Her general condition improved remarkably, and she put on weight. From that time until she was shown at the meeting numerous fresh lesions have appeared; some of these have broken down spontaneously, sometimes discharging through several small openings. The Wassermann reaction was negative, and the reaction to Moro's tuberculin test was also negative.

Sporotrichosis was suspected, and some of the pus from unbroken lesions was submitted to Dr. Fildes, who failed to grow any organism. Dr. Adamson kindly saw the patient, and also took some of the pus for examination, and he also failed to grow an organism, though he agreed with the exhibitor that the condition closely resembled sporotrichosis. Agglutination tests were also made in the Bacteriological Laboratory at the London Hospital, but the result was negative. The obvious diagnosis in this was Bazin's Erythema induratum, but the character of the lesions, their acute onset, and the fact that fresh foci developed while the patient was at rest in bed, and her general condition, as indicated by increase in weight, was steadily improving, were in the exhibitor's opinion sufficiently unusual to render the case worthy of being brought before the Section.

Dr. ADAMSON said that when he saw the case on a previous occasion he felt sure that it was one of sporotrichosis, for the lesions were so exactly similar to those of the case of sporotrichosis which he had had under his care in the hospital and which he had exhibited at a previous meeting. The manner in which the gummata broke through the skin by cribriform openings was exactly that of his own case. He had, however, been unable to grow sporotrichum although he had inoculated a dozen or more tubes on various culture media, including glucose-agar, and had made the inoculations in the approved manner of spreading a large quantity of the pus over the surface of the medium. The failure to find the fungus certainly made the diagnosis of sporotrichosis doubtful, though he was still inclined to regard it as such. He thought, however, that a tuberculin test by subcutaneous injection should be made.

The PRESIDENT considered that it was a case of persistent Bazin's disease, in spite of the fact that fresh lesions came out while the patient was lying in bed in the hospital.

Dr. A. WHITFIELD showed a case of *unusual papulo-necrotic tuberculide*. The patient was a rather stout and quite strong-looking woman, aged 50 years. She had been seen first by Dr. Whitfield in March, 1912, when he had made the provisional diagnosis of late syphilide, and at the same time a post-graduate working with him had offered

the diagnosis of Lichen planus. Wassermann's reaction had been sought for on several occasions, but was always absent. In spite of this the patient was put upon a short course of antisppecific treatment, without modification of the eruption. Some months after her first appearance the patient complained of a swelling in the right side of the neck, and it was then found that she had an acutely inflamed and tender gland. A surgical colleague was consulted about this with the special view to the possibility of its being tubercular, and gave the opinion that it was most probably not tubercular, but secondary to carious teeth. The question of a tuberculide, which had already been entertained, was now reopened, and although clinical examination had revealed no evidence of visceral tuberculosis, the fact was now elicited that twenty years before the patient had had an abscess at the bottom of the spine, due to a fall, which had discharged for one or two years and then had completely healed. No scar could be found to indicate the position of the abscess, and it was thought that it might have been a fistula.

As the eruption remained unaltered for so many months the idea of its being a tuberculide gained ground, and finally the patient was taken into the ward for further investigation. A small dose of old tuberculin was injected hypodermically and one of the lesions was excised. There was a distinct rise of temperature within twenty-four hours of the injection and a strong local reaction at the site of injection. The gland in the neck tumefied slightly and became tender, but the eruption showed no change. The result of the reaction was therefore somewhat equivocal, as it proved that the patient was tubercular, but did not prove that the eruption was also tubercular. On examination of the excised lesion, however, it was found that the change was a perifollicular granuloma which had undergone central caseation. No ordinary leucocytic suppuration was present, and although giant-cells were few, the general arrangement was very suspicious of a tubercular nodule. A large number of sections were therefore stained by the Ziehl-Neelsen method, and the tubercle bacillus was demonstrated in one section, lying almost at the edge of the caseated area in close contact with, and probably phagocytosed by, a large mononuclear cell. (This specimen was shown at the meeting.)

On exhibition the following condition (which had remained practi-

cally unchanged for a year) was observed: The eruption was limited to the sacral region, the buttocks, and the outer sides of the thighs for a small area immediately posterior to the great trochanters. It occurred in what might be described as herpetiform groups with outlying elements, and in one or two places the elements were arranged in the form of a ring. The individual lesion consisted of a small, dome-shaped, bluish papule, which, originated rather deeply seated in the corium, slowly rose to the surface, and either developed into a very indolent pustule or flattened down to a flat, brownish, shiny papule, and finally disappeared, leaving behind a minute atrophic cicatrix. No "apple-jelly" formation was seen on diascopic examination. All these stages were to be observed at the time of exhibition, and it was very striking how great was the resemblance to both *Lichen planus* and a late papular syphilide.

An unusual symptom of the eruption was that the lesions were both painful and very itchy.

Dr. WHITFIELD said that the case was of some interest and importance, for more than one reason. He believed that the senior members would agree with him when he said that it was acknowledged in the old Dermatological Society of London that there were tuberculides that could not be distinguished clinically from syphilides, and that pathological and bacteriological examinations were necessary to make the distinction. Fortunately in this case the chain of evidence was very complete. The most important point, however, was the actual finding of an undoubted tubercle bacillus in situ. He had always fought stoutly against the theory that these granulomatous lesions were toxic rather than bacillary in nature. He did not deny that a "toxi-tuberculide" might exist, but he thought if it did it must partake rather of the nature of an erythema than of a mass of granulation-tissue with giant-cells. Lastly, the actual finding of the bacillus was a matter of interest on account of its rarity. He was aware that it had been found by Jacobi in *Lichen scrofulosorum*, by Ormsby and MacLeod in a tubercular gumma of a baby, and by a very few other observers in other lesions, but the positive findings were few and far between. He was convinced that all these lesions were due to the presence of bacilli, alive or dead, and he hoped that the expression "toxi-tuberculide" as applied to these lesions would be dropped.

SPECIAL EVENING MEETING.

April 17th, 1913, Sir MALCOLM MORRIS in the Chair.

Demonstrations on the subject of malignant and doubtfully malignant tumours of the skin.—(I) Dr. WHITFIELD showed eleven lantern-slides illustrating the genesis of the soft mole, nævo-carcinoma, and

Paget's disease of the skin. The first five microphotographs were taken from a single section of a tumour from a child's head. The case was a rare one under the care of Mr. Mower White. The whole of the top of the head had been covered since birth with hemispherical tumours of different sizes, which had lately begun to grow so that they varied in size from that of a large pea to that of a small plum. The hair had not grown over the site of the tumours, so that the case resembled to some extent those described under the name of withering sarcoma of the scalp. Mr. White had removed the whole area and covered in the raw surface with skin-grafts. The result was perfectly satisfactory, as the child was left with a smooth healthy scar, and there was no greater area of baldness than had existed before. The slides showed first the acantholysis or loss of prickles at the edge of the growth; in a further stage the cells were seen lying in a sort of lymph space in the lowest layer of the epidermis; further in still they could be seen dropping off into the corium; further still they could be seen lying deep in the corium, but still arranged in clumps as they originated from the epidermis; and lastly, in the oldest part of the mole they formed lines in between the bundles of fibrous tissue, and this was the stage which had led to the idea that the tumours were lymphangiomatous or endotheliomatous in nature. In this case, however, owing to the activity of growth all stages could be accurately traced from the beginning to the end.

The second series of slides were taken from the case of a woman who had had a mole all her life beneath her breast. This had begun to enlarge rapidly and had been removed by a doctor, but recurrence had occurred in the scar. When Dr. Whitfield saw her there was a large elliptical patch of flat pigmented infiltration in the sub-mammary fold. There were no enlarged glands and he had removed the growth. Three years after there was no recurrence. The slides showed almost exactly the same process as the previous set, except that there was in some parts pigmented and in others pigmentless downgrowth. The process was far easier to follow in the non-pigmented growth, but he had seen by his method of bleaching pigment that the process was identical in the two cases. A topographical low-power specimen was also shown to indicate how superficial was the invasion, though the method of spread was typically malignant.

Lastly, Dr. Whitfield showed a section of early Paget's disease to

show how similar was the method of onset in this disease. In this case the acantholytic cells, however, were not limited to the basal epidermis, but occurred in the middle of the epidermis, and were even exfoliated in the horny layer, so that one could find them as double-contoured bodies (pseudo-psorosperms) by scraping the surface and examining in potash.

(11) Dr. J. H. SEQUEIRA showed by the epidiascope a series of

FIG. 1.

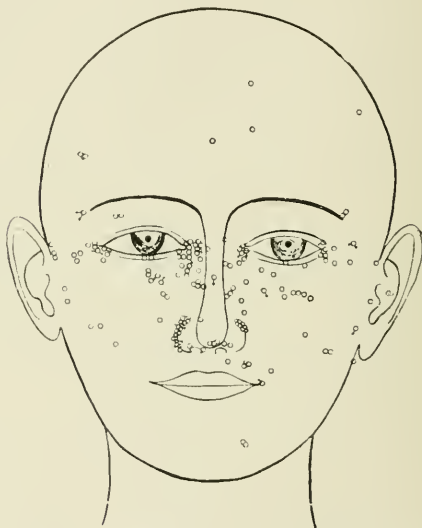


Diagram of the sites of origin of 220 cases of rodent ulcer (basal-celled carcinoma) of the face.

photographs illustrating the usual sites and characteristic development of rodent ulcer of the face. He said that some years ago Mr. Lenthal Cheate drew attention to certain peculiarities in the distribution of malignant disease, and suggested that neoplasms of malignant type usually developed in Head's maximal points. To determine whether this was the case, the speaker had large diagrams made upon which he marked the site of origin of over 200 cases of rodent ulcer (Fig. 1). These observations showed that, in the bulk

of the cases the disease started at the inner canthus and about the ala nasi. Some occurred at the outer canthus, a few on the lids, others in or about the ear, and others in different situations, the lips and chin being the least likely to be affected. One interesting point demonstrated by the chart was that a larger number of rodent ulcers developed on the right side of the face than on the left, and this appeared to give ground for the supposition that local irritation—*e. g.* scratching—had something to do with the development of the tumours, most people being right-handed, and probably more prone to irritation of the right side of the face by the fingers. From a study of several hundreds of cases, Dr. Sequeira believed it was possible to group cases of rodent ulcer and to anticipate the direction in which they were likely to develop—an important point both in regard to prognosis and treatment. Illustrations of the development of rodent ulcers in a number of situations were shown, demonstrating the evolution of the process from the early stage to extensive destruction.

Orbital group.—The early involvement of the lachrymal sac and spread of the disease to the orbital cavity ending in a huge excavation were presented. In the advanced cases the upper nasal sinuses are exposed. Illustrations were also given of the somewhat rare variety of rodent which runs lengthways along the upper or the lower lid. Rodents at the outer canthus usually develop downwards, and early involve bone.

Nasal group.—The common form starting in the angle between the ala and the naso-labial sulcus tends to destroy first the ala, and later a large triangular area extending down to the muco-cutaneous margin of the upper lip. A lateral nasal variety in which the nasal bone becomes involved early and leading to perforation was shown in different stages.

Frontal group.—Here the ulcers are usually of the superficial cicatrising type. They often start just above the root of the nose and extend upwards in the frontal region.

Maxillary and malar group.—The ulceration usually develops transversely, forming an oblong excavation. The bone is involved early, and huge tumours may invade the antrum and push up the eyeball and depress the palate.

Auricular group.—Rodents may start in the concha and then tend

to eat out an irregular hole. If they begin at the upper part in front they usually extend on to the temporal region. Pre-auricular ulcers extend forward and a parotid fistula may form, and the facial nerve is often involved. Among the rodents starting behind the ear, photographs were shown of one that remained limited to the retro-auricular sulcus.

Upper lip group.—Rodent ulcer of the upper lip is uncommon, but there is a very troublesome form which starts somewhere between the nose and the free margin of the upper lip, and if not treated early involves the whole of skin and tissues between the nose and the edge of the lip, ultimately destroying bone and exposing the roots of the teeth.

Lower lip group.—In the experience of the exhibitor this type is even rarer than the upper lip variety. Here there is also a tendency to resist treatment, and in one case the lower jaw was eroded and the roots of the incisor and canine teeth were exposed.

Mental group.—These cases usually occur to one or other side of the chin close to the mental foramen. They are troublesome to deal with as they early involve the bone.

In all the cases shown on the screen there was no doubt about the diagnosis of rodent ulcer, as shown by the character of the lesion, the slow development, the absence of glandular involvement even after many years, and in most instances by a microscopical examination.

Photographs of two remarkable cases of multiple rodent ulcer of the face were also exhibited.

The PRESIDENT said that if they were to start a clinical discussion on rodent ulcer it would occupy the entire evening. He would only like to say that he had taught for years—thirty-five at least—the enormous difference from the point of view of treatment between the superficial and the fairly advanced cases. At one time no particular attention was paid to rodent in its early stages: it was left to grow until a later stage before any active treatment was instituted. It was only in later years that rodents had been recognised as malignant growths before they involved the periosteum and bone. But such early recognition of their malignancy was a vital matter.

(III) Dr. J. E. R. McDONAGH showed under the microscope several slides illustrating epithelial growths; and also sections of skin and glands from cases of various leukaemic conditions. He said that he preferred to make no remarks upon them, owing to the short time at his disposal and the difficulty of showing the slides by means of the epidiascope.

(IV) Dr. HALDIN DAVIS showed some specimens from St. Bartholomew's Museum, and some slides. Among the former were some amputated fingers of two X-ray operators who had suffered from X-ray carcinoma. Another interesting specimen was an epithelioma which started in a tattoo mark, a part of the tattoo mark being still visible. After the removal of the primary growth the patient had glands removed from the axilla, and ultimately had a recurrence in an inoperable position and died. The slides shown by this speaker included photo-micrographic views of two sections, both taken from the same patient but from different tumours. The one showed the microscopic structure of an epithelioma, taken from the back of the thigh of a patient, aged 55 years, and there was no doubt about the fact that it was an epithelioma, but an interesting point was that on the sole of this patient's foot there was another tumour of quite different structure, which under the microscope more nearly resembled a rodent ulcer than anything else. Finally he showed a case in which the section had been taken from a tumour appearing at the pinna of the ear. To all appearance it was an epithelioma, but quite soft; but under the microscope it appeared only as a suppurating papilloma, and he scraped it away under an anæsthetic. He scraped it again and it recurred, and there was yet another recurrence, but quite small and local. Finally he excised it completely, and cauterised the base with pure carbolic acid, and since then it had healed up completely.

Dr. WILFRID FOX thought that the likeness between the development of the mole and the nævo-carcinoma which had been brought out by Dr. Whitfield in his slides was extraordinarily great, and the difference seemed to be one of resistance of tissue, which in the case of the mole was strong.

Dr. WHITFIELD admitted the great number of plasma-cells in these malignant growths, and said that he had always regarded them as a defensive wall. They were found as a rule surrounding the epithelial downgrowths and the rest of the corium. Moreover, they were not found in the innocent moles. He had cut a good many moles, and except in the cases of those situated in such places as the axilla, where they were irritated by sweat and so forth, he had found no inflammatory action around them. The plasma-cells in the malignant growth were evidence, he thought, as in the epithelial tumours, of an attempt at defence on the part of the patient's tissues. If he might add to his remarks on his slides, he would point out that in nævo-carcinoma they were all taught to believe that metastasis was early and fatal. But there was a class of nævo-carcinoma in which the metastasis was not early, and the case he had shown that evening was one of that class. The tumour was excised three years ago, and the patient was still quite well. The

reason he knew that she was quite well was because he had a message from her medical man some little time previously to say that a tumour had developed in the axilla. This, however, turned out to be only a small papilloma which need not have been excised at all. The patient was quite well, and there were no glands. The criterion appeared to be simply one of depth. The low-power specimen he had projected on the screen revealed the extraordinary superficial growth. One case was excised by the same surgeon three times in seven years, and the third time successfully and he got the whole away. The speaker believed that it was possible to tell microscopically if the growth was submitted to him the probable danger to life. The best cases from the point of view of ultimate complete recovery were those in which there were broad sheets of cells lying horizontally in the corium.

Dr. FOX said that pathologists differed as to malignancy, and asked whether Dr. Whitfield was convinced as to the malignancy of the primary growth in his case.

Dr. WHITFIELD said that the question depended upon what was the criterion of malignancy. In the case under discussion there were typical cells rapidly infiltrating and invading tissue in which they had no business to be. That he took to be malignancy.

The PRESIDENT asked whether surgery was necessarily the sole treatment for these cases.

Dr. WHITFIELD said that the cases did not yield to X-rays; he could not say about radium.

Dr. SEQUEIRA said that he had one case in which a flat pigmented patch—he supposed it would be called a pigmented mole—had entirely disappeared under radium. It resembled very much the type of case Dr. Whitfield had described. It would be worth while, he thought, to try radium. The pigment in this instance had entirely disappeared, and the scar was left. He was watching it very carefully, but up to the present it could be said that it had disappeared under radium.

Dr. GRAHAM LITTLE put in a plea for treatment of rodent ulcer by freezing with carbon dioxide snow. For nearly three years he had used this method, and was personally satisfied that the cures were as frequent and as permanent as with any other method, and he regarded it as the ideal treatment for the small and early rodent of the skin, where the deeper tissues were not involved. He regarded this treatment and ionisation as safer than either radium or X-rays, for one could estimate the depth of the tissue acted upon, which was impossible with X-rays and radium. Advocates of the latter agents especially used arguments which were mutually destructive, for it was claimed that radium emanation penetrated much more deeply (more deeply than is, in fact, desirable in the great majority of cases), and yet did not harm the deeper tissues. The effect was miraculously operative when required and miraculously inert where it admittedly might do mischief.

Dr. WHITFIELD said that he was rather in opposition to the President on the question of surgery. He would treat rodent ulcers with X-rays if they did well from the start, but if they did not yield rapidly he would have them widely and deeply excised. He fancied that, in some of the cases of which Dr. Sequeira had shown photographs, a moderate surgical operation would have saved the

situation if it had been done when they were first seen. In rodent ulcer a rather free operation should be done. It was not a question of cosmetics, but frequently of the patient's life. A wide and efficient excision was generally satisfactory. Of the few small rodents that he had cut out, he had not seen a single one relapse. He thought that Dr. Gray's case, shown at the afternoon meeting, proved that a very nice cosmetic result could be obtained in cases which had entirely resisted X-rays and radium.

Dr. A. M. H. GRAY did not consider that carbon dioxide was always suitable in early cases of rodent ulcer. He had recently had a case, sent to him by a surgeon, of a patient with a small warty growth on the left side of the bridge of the nose. He had applied snow to it for a minute, but ten days later the growth had increased very rapidly in size. It was at once excised and proved to be a squamous epithelioma.

Dr. R. A. BOLAM said that he had treated a fair number of rodent ulcer cases with snow, and had been grievously disappointed in the ultimate results. The relief to the patient was undoubtedly rapid and temporary satisfaction was usually expressed, but recurrence seemed much too frequent. X-rays and radium gave a much better prospect than carbon dioxide snow did, and were to be preferred in that the results were permanent in the majority of cases.

The PRESIDENT said that his experience with regard to freezing—and he had practised the method in several cases—was that one had to make a very careful selection of the type of rodent for the treatment. A slight thickening edge might very often be frozen successfully, but if there was the slightest depth in the growth he would much rather trust radium or X-rays than freezing.

INTERNATIONAL MEDICAL CONGRESS.

SECTION XIII: DERMATOLOGY AND SYPHILOGRAPHY.

THE Section of Dermatology and Syphilography will be held in the Medical School of St. Thomas's Hospital, by the kind permission of the Governors, under the Presidency of Sir Malcolm Morris, K.C.V.O.

The subjects for discussion at the morning sessions of the Congress and the reporters are the following.

Thursday, August 7th.—(1) "Epithelioma of the Skin, Benign and Malignant." Reporters: Dr. Darier (Paris), Dr. J. A. Fordyce (New York), and Dr. Jadassohn (Berne).

Friday, August 8th.—(2) "Alopecia Areata and Allied Conditions." Reporters: Prof. Pellizzari (Florence), and Dr. Saboureaud (Paris).

Saturday, August 9th.—(3) "Syphilis, its Dangers to the Community, and the Question of State Control." Combined discussion with the Section of Forensic Medicine. Reporters: Dr. Blaschko (Berlin), Prof. Finger (Vienna), Major French, R.A.M.C. and Dr. Gougerot (Paris).

Monday, August 11th.—(4) "The Treatment of Syphilis by Salvarsan and Allied Substances." Combined discussion with the Section of Naval and Military Medicine to be held at the Royal Army Medical College (Millbank). Reporters: Prof. Ehrlich, Major T. W. Gibbard, R.A.M.C., conjointly with Major Harrison, R.A.M.C., and Prof. Vennin (Paris).

Tuesday, August 12th.—(5) "The Vaccine Treatment of Diseases of the Skin." Reporters: Prof. T. C. Gilchrist (Baltimore) and Prof. A. Whitfield (London).

The afternoon sessions of the Congress will be devoted to the reading of independent papers, of which there is a long list. Among them the following may be mentioned:

Dr. Ciarruchi (Rome): "Some Observations on the Treatment of Benign Epithelioma of the Skin."

Dr. Dubreuilh (Bordeaux): "Epithelioma of the Skin"; "Alopecia areata."

Sir Dyce Duckworth (London): "Alopecia areata."

Dr. Ehlers (Copenhagen): "The Treatment of Syphilis by Large-dose Injections of Benzoate of Mercury."

Dr. A. W. Mills and Dr. Homer Swift (New York): "Intra-spinous Injections in the Treatment of Syphilitic Disease of the Central Nervous System."

Major H. C. French, R.A.M.C.: "Public Health Aspects of Syphilis."

Professor Gaucher and Joltrain (Paris): "Diagnostic Value of the Re-fixation Reactions in Cutaneous Diseases."

Dr. Gougerot (Paris): "The Pathogenesis and Treatment of Eczema."

Dr. Hallopeau (Paris): "The Cure of Syphilis."

Dr. Heidingsfeld (Cincinnati): "Total Congenital Anonychia."

Dr. Lassueur (Lansanne): "Vaccine Treatment of Furunculosis and Pustular Acne."

Dr. Cranston Low (Edinburgh): "The Nerves of the Skin as seen by the Vital Staining Method," and "Some Peculiar Chronic Ulcerative Skin Lesions."

Mr. J. E. R. McDonagh (London): "Epithelioma of the Skin," and "The Cause and Treatment of Syphilis."

Sir Malcolm Morris and Dr. MacCormac (London): "Two Years' Experience with Salvarsan."

Dr. Max Müller (Metz): "On the Prophylaxis of Syphilis."

Dr. Pernet (London): "A Case of Mycosis d'emblée treated unsuccessfully by Salvarsan and X-rays."

Prof. Peyri y Rocamora (Barcelona): "A Contribution to the Etiology and Treatment of Psoriasis."

Dr. Saalfeld (Berlin): "On the Histology of Multiple Cutaneous Tumours."

Dr. Parkes Weber (London): "Subcutaneous Calcinoses."

Dr. Emil Wechsler and Dr. Oppenheim (Vienna): "Cutaneous Reactions in Normal and Pathological Skin."

Special attention will also be paid to the clinical aspect of the subject, and demonstrations of interesting cases will be held before the meetings. These cases will be grouped as far as possible to illustrate the special subject under discussion on each day. There will be a large Museum of Models, and an Exhibition of Photographs and Drawings of Rare Diseases of the Skin.

The following are the executive officers of the Section:

President.—Sir Malcolm Morris, K.C.V.O.

Vice-Presidents.—Wallace Beatty, Henry Fitzgibbon, T. Colcott Fox, James Galloway, Allan Jamieson, J. Ernest Lane, Alexander Morton, J. J. Pringle, J. H. Stowers and Norman Walker.

Council.—P. S. Abraham, H. G. Adamson, R. A. Bolam, J. Lemare Bunch, J. F. Christie, S. Ernest Dore, Alfred Eddowes, Willmott H. Evans, W. E. Foggie,

Wilfrid Fox, F. Gardiner, A. M. H. Gray, Arthur J. Hall, A. Douglas Heath, G. H. Lancashire, E. G. Graham Little, J. E. R. McDonagh, G. N. Meachen, J. Wyllie Nicol, G. Pernet, Arthur Shillitoe, E. Gilbert Smith, Edward Stainer, Henry Waldo, A. Whitfield, W. Kenneth Wills, F. P. Wilson.

Secretaries.—R. Cranston Low (Editor of *Transactions*), J. M. H. MacLeod (Acting Secretary), H. Leslie Roberts (Provincial Secretary), J. H. Sequeira (in charge of Museum and Clinical Demonstrations).

CURRENT LITERATURE.

CASE OF SOFTENING OF THE SPINAL CORD IN A SYPHILITIC AFTER AN INJECTION OF SALVARSAN. LEO NEWMARK. (*Amer. Journ. Med. Sci.*, vol. cxliv, p. 848.)

THIS paper contains mainly an account of the pathological appearances discovered after death in the case of a young man who became paralysed in the lower extremities after an injection of salvarsan. The clinical account has been previously published by Dr. Victor G. Veeki, *California State Journal of Medicine*, May, 1912.

The patient, aged 23 years, had been treated from June 1st to September 3rd, 1908, by a series of intra-muscular injections of corrosive sublimate for a syphilitic roseola, following a typical indurated ulcer. In March, 1910, a further series of injections of bichloride of mercury were administered by Dr. Veeki on six successive days, followed by two injections of salicylate of mercury, a week intervening between these. The patient returned on May 30th, 1911. With the exception of swollen glands, there were then no manifestations of syphilis. At noon on June 10th 0.3 grm. salvarsan was injected into each buttock. On the evening of June 12th, having felt perfectly well in the intervening fifty-six hours, the man first felt a numbness in his legs, then great fatigue in them, and soon after had difficulty in urinating. Loss of power of movement and of sensibility rapidly increased, and by June 14th the paraplegia was complete in every respect. The patient showed no signs of improvement; the bladder and rectum became completely paralysed, he had numerous bed-sores and other trophic disorders, and much fever. Neither mercury nor iodide nor an intra-venous injection of 0.6 grm. salvarsan had any influence on his state, and he succumbed on August 29th, 1911.

A careful and complete account of the morbid condition of the spinal cord is given. It shows that the patient suffered from extensive softening of the cord, with great destruction of the white nerve-substance, the degeneration of myelinelike in many places producing cavities in the cord. The grey matter also showed signs of degeneration following inflammatory infiltration.

The question naturally arises, Was this rapid destruction of the central nervous system the consequence of the injection of the salvarsan, or was it the result of the syphilitic disease? The patient had been infected with syphilis three years before his death, and presented the first symptoms of a fatal softening of the cord fifty-six hours after an injection of salvarsan. This close sequence of drug and disease must impress both the most casual observer and the enthusiastic

supporter of treatment by means of salvarsan with a very uncomfortable sense of cause and effect. Cases of syphilitic myelitis of such severity as the one reported have long been known to occur, but such cases as the one quoted must be very carefully borne in mind, and should be regarded as indications for very thoughtful consideration before the administration of poisonous remedies in large doses. The author remarks: "When subsequences repeat themselves with some degree of uniformity, they come to be looked upon as consequences. Hence, that which with good reason may be interpreted in Dr. Vecki's case as a mere coincidence, when this case is considered by itself, assumes in conjunction with other similar observations the importance of a consequence. It must, therefore, be admitted after all that the salvarsan was somehow an agent in the final result."

J. G.

THE SALVARSAN-TUBERCULIN TREATMENT OF LUPUS VULGARIS AFTER HERXHEIMER AND ALTMANN. BERNHARDT.
(*Archiv f. Derm. u. Syph.*, October, 1912.)

THESE authors were the first to notice that after every "606" injection in six cases of Lupus vulgaris there followed a reaction in the lupus tissue and in the patient which strongly reminded them of that which occurs after tuberculin. To account for this phenomenon they invented two hypotheses. One of them presupposes the death of tubercle bacilli with production of tuberculin, which acts in the same way as therapeutic injections of the laboratory products. The other regards the reaction as the result of the direct influence of salvarsan on the cell elements of the tubercle. In this article the author describes his results with a combination of tuberculin and "606" injections in six cases of Lupus vulgaris, in which no local treatment of any kind was undertaken. He concludes that in Lupus ulcerosus et serpiginosus there is no better method for ensuring a rapid cure. In some cases there was complete cicatrization of the ulcers in from eight to twelve days, with absorption of the lupoid tissue. Where more than two or three injections of salvarsan were required the effect of the remedy seemed to yield the first place to tuberculin. In his experience the best method is to give the salvarsan in comparatively large doses—3 g.—at long intervals (one month), and to fill these intervals with energetic tuberculin injections of gradually increasing strengths from .5 mgrm. to 15 mgrm., repeated every four or five days according to reaction obtained.

H. C. S.

A CASE OF SO-CALLED PRURIGO NODULARIS. JOSEPH ZEISLER.
(*Journ. of Cut. Dis.*, November, 1912, p. 654.)

In this contribution the case of a woman, aged 41 years, is described, in which on the extensor aspects of the arms and legs were numerous pea- to hazel-nut-sized efflorescences of dense consistency and brownish-red colour. The majority of these nodules were distinctly rough on the surface and verrucose, while the smaller lesions had a smooth, shiny surface. Their presence was associated with terrible itching and with an increase of eosinophile cells in the blood. A few cases of this type have been described, the following names having been given to them: Prurigo nodularis (Hyde), multiple tumours of the skin accompanied by

intense pruritus (Hardaway), multiple tumours of the skin in negroes, associated with itching (Hirschler). These cases are possibly related to what is known as *Urticaria perstans*, though in this case there was no definite wheal-formation preceding the nodule.

J. M. H. M.

AN INQUIRY INTO THE EFFICIENCY OF SULPHUR LOTIONS.

O. H. FOERSTER. (*Journ. Cut. Dis.*, November, 1912, p. 665.)

ACCORDING to the writer there are two opposing theories with regard to the manner of action of sulphur.

Sulphur in contact with the skin is itself practically inert. To be active it must be converted into some soluble form or gaseous product. It has been suggested, on the one hand, that its action is the result of its reduction into hydrogen sulphide, and on the other that it is caused by its being oxidised into sulphuric acid.

Of the two the hydrogen sulphide theory is the more generally accepted; consequently the therapeutic efficiency of sulphur preparations depends largely on the sulphur being in such a form that hydrogen sulphide is easily produced. According to this standard watery suspensions of sulphur are of little value, as the sulphur is insoluble in water and practically inert. On the other hand, if sulphur be combined with ether or alcohol, a small proportion of the sulphur becomes dissolved and the lotion becomes slightly active.

Zinc sulphate and potassium sulphide interact and form a more efficient preparation when freshly prepared. The most active of all the sulphur preparations, however, would appear to be *liquor calcis sulphurata*, the well-known preparation of milk of lime and sulphur; when this alone is in contact with the skin nascent sulphur and hydrogen sulphide are formed.

J. M. H. M.

FATAL CASE OF PURPURA. W. YOUNG. (*New Zealand Medical Journal*, vol. xi, No. 43, p. 162.)

WHEN seen, the patient, a woman, gave a history of having had for some weeks previously pains in various joints, which had become worse, and some fever made its appearance, with vomiting and diarrhoea. Red spots (evidently petechiæ) showed themselves on various parts of the body, and a large red patch under the left eye and another over the left knee. Purpuric spots were present on the face, neck, body and limbs. On the limbs the spots were most numerous about the joints, especially the left knee, left elbow, and both ankles. Some spots were to be seen in the mouth. Temperature rose to 101° F.; pulse 120. Salicylate of bismuth with calcium chloride and an opiate were ordered. Next day the temperature was 103° F., and patient was shivering. The following day some blood was drawn off for culture purposes, but the cultures proved negative. The patient died the same night.

J. L. B.

MYIASIS LINEARIS. WERNECH MACHADO. (*Archivos Brasileiros de Medicina*, vol. ii, No. 3, p. 395.)

THE author gives drawings of three cases of "creeping disease," the disease in each case affecting the feet. He has already had twenty cases of the same disease, and in only two cases were the hands affected. The outline of the lesions

appears to be in every case very irregular, but the disease advances rapidly, at the rate of some two to three centimetres a day. The patients appear to become infected either on the sea-beach, or in the neighbourhood of seaside sand. The active agent causing the disease is almost certainly an animal parasite, the *Hypoderma lineata* (larva) or sarcopede or filaria (the hypothesis preferred by Horta), but it is difficult to determine its exact nature.

Treatment consists in destroying the skin covering the burrow, and then applying tincture of iodine, or yellow oxide of mercury.

J. L. B.

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THE BRITISH JOURNAL OF DERMATOLOGY. JUNE, 1913.

THREE CASES OF GRANULOMA ANNULARE.

By J. L. BUNCH, M.D., D.Sc., M.R.C.P.,

Physician for Diseases of the Skin to the Queen's Hospital for Children, and to the Hospital for Skin Diseases, Leicester Square.

I HAVE had recently three cases of what I prefer to call Granuloma annulare under my care, and on looking up the literature I have been struck with the want of agreement among dermatologists as to the essential clinical and pathological characteristics of this group of cases. The first case recorded appears to be that of Colcott Fox in 1895, which he called ringed eruption, and numerous cases have been reported since under various names. The difficulty is, however, to be quite sure that these cases ought to be included under the heading of Granuloma annulare, inasmuch as they do not all correspond exactly to the cases originally described and exhibited by Crocker. The matter is much simplified if the group is held to include all chronic ringed eruptions which approximate to the description given by Crocker, and no difficulty can then be raised to applying the name to the lesions which have been variously described as Erythema elevatum dintinum, Lichen annularis, and Neoplasie circonée et nodulaire des extrémités. Of Boeck's sarcoid I shall speak later, and do not here group it with the other cases.

In trying to determine the limits of the group, a considerable amount of confusion is caused by the inability of dermatologists to agree as to what are the earliest appearances present in these cases, whether the rings are always or ever preceded by an erythema, whether the rings are formed by coalescence of a number of nodules, whether they advance centrifugally, and whether some central necrosis is an essential characteristic of the microscopic appearances.

In 1908 Graham Little collected a series of forty-nine published cases which he regarded as *Granuloma annulare*, but some of his cases have been objected to, especially his third case, and the cases of Darier, MacLeod and Hyde, while the microscopic appearances of Savill's case have been thought to correspond more closely to *Lichen planus* than to *Granuloma annulare*.

Of my three recent cases, one was rather unusual because the dorsa of the feet were affected and because of the age of the patient, the child being only two and a half years old. The patient was shown at the Dermatological Section of the Royal Society of Medicine and everyone agreed that it was a typical case of *Granuloma annulare*. When the boy first came under my care he was only two years and four months old, and there was then a well-defined, raised, ringed eruption on the dorsum of the right foot, which had already been present some two or three months. This eruption consisted of a single continuous ring about 1 in. in diameter, composed of solid, definitely elevated and slightly nodular tissue, which felt firm to the touch, and in places was appreciably nodular. Nodules were in fact distinctly visible to the eye at some points of the ring, and, like the rest of the ring, had a smooth, pale surface, perhaps a trifle glistening. In addition to this complete ring, and situated about $1\frac{1}{2}$ in. away from it, was an irregular, nodular mass about the size of a pea, which, when first seen, was said to have been present only a fortnight. During the interval this lesion had increased in size, spreading slightly at the ends until it tended to form a crescent. To the touch there was no appreciable difference in structure from that of the larger ring. The crescent gradually extended while under observation by coalescence with small fresh nodules to form the complete ring figured in the photograph. If there had at any time been any nodules within the circumference of the ring—and there appeared to be traces of such nodules remaining—these had undergone considerable involution, leaving more or less normal skin in the centre of the ring.

The child seemed to suffer no inconvenience from the presence of the lesions, nor were there any subjective symptoms apparently present. He was otherwise healthy. Nothing of any importance in the family history could be elicited to throw light upon the eruption, and there was no family history of tubercle.

Microscopic examination of an excised portion of the larger ring stained with hæmatoxylin and eosin, Pappenheim and other stains, showed that the most marked change in the epidermis of the affected area was a thickening of the horny layer and a lengthening of the inter-papillary bodies, as compared with the central portion of the ring and the surrounding healthy skin. Where the greatest thickening of the horny layer was present the nuclei stained somewhat imperfectly, as in a parakeratosis.

In the derma the most noticeable changes were the perivascular infiltrations of small round-cells, uninuclear lymphocytes and leuco-



Granuloma annulare affecting the dorsum of the foot.

cytes, associated occasionally with a few mast-cells and erythrocytes possibly due to diapedesis. There was some dilatation of the vessels of the derma, especially in the neighbourhood of these infiltration areas, and also of the papillary vessels. Some of these areas in the centre of the inflammatory zone seemed to show early stages of necrosis, with deficiency of staining of the cell nuclei.

Changes in the endothelial cells of the blood-capillaries have been elsewhere described, but I could not assure myself of any such changes in my preparations.

There was no apparent change in the elastic fibres, and no bacteria could be demonstrated in the sections.

The other two cases were quite typical, and affected the backs of

the hands. One was shown at a meeting of the Royal Society of Medicine.

A small portion of skin removed from one of these cases showed changes differing but slightly from those above described as found in the first case.

The microscopic appearances appear to point to a chronic inflammatory process involving the epidermis and derma, and the perivascular infiltration of the latter to a probable hæmatogenous origin. Whether this is due to some toxin reaching the skin by the vascular system it is impossible to say.

Since Graham Little's collection of cases, published in 1908, other cases and papers have been published by Cappelli, Dalla Favera, Halle, Vignolo-Lutati and others, and it is of interest to compare some of their findings with those described above.

The case of Granuloma annulare described by Capelli in 1909 was one involving the dorsum of the hand in the neighbourhood of the metacarpo-phalangeal joint of the middle finger. The evolution of the lesion was slow, and it only attained its definite circular shape by the end of six months, and it then appeared as a pink, raised ring enclosing a reddish area of smooth skin. The ring was somewhat nodular in places, and on section showed some slight, diffuse œdema, with infiltration round the deeper vessels of the corium. This consisted of large, multinuclear cells, young connective-tissue cells, poly-

nuclear leucocytes and some mast-cells. Giant-cells and plasma-cells were not to be found. A focus of necrosis was present in the corium which involved also the collagenous and elastic tissue. The presence of young connective-tissue cells in the infiltrations might possibly be held to point to a sclerotic tendency in the lesions, but it could not be said to be very pronounced.

Dalla Favera's cases of Granuloma annulare are chiefly interesting from the point of view of contrasting them with two cases of his of Erythema elevatum et diutinum. The Granuloma annulare cases showed thickening of the granular and horny layers, with some necrosis in the areas of infiltration, and also the presence of giant-cells, leucocytes, lymphocytes, a few polynuclear leucocytes and mast- and plasma-cells. The cases of Erythema elevatum et diutinum did not differ to any very great extent microscopically from this description, but clinically the difference was more marked. Whereas the Granuloma annulare cases are essentially chronic and progress very slowly, with scarcely any subjective symptoms, the cases of Erythema elevatum et diutinum have an acute onset, are accompanied by rheumatic pains in joints and general malaise, and are also differentiated by their more extensive distribution. Such cases resemble to a certain extent many of the chronic erythemata, but the lesions of the former are more fixed and indurated, run a more chronic course, and have a less erythematous and more fibroid appearance than the latter. These cases of Dalla Favera seem to correspond fairly closely with a case which Audry described under the title of Erythématosclérose pemphigoïde, and also with a case which Halle brought before the Deutsche dermatologische Gesellschaft.

Galloway's case of Lichen annularis showed lesions on the dorsum of a finger, and its clinical and histological appearances seem to correspond closely with those previously described as characteristic of Granuloma annulare. The tumores benigni sarcoidei of Rasch and Gregersen and the Boeck's sarcoids of Galewsky show much the same localisation and histological appearances—well-marked infiltration of a neoplastic type, infiltration of new connective tissue elements round the blood-vessels, with small areas of necrosis—as the typical cases of Granuloma annulare. The assumption of a sarcoid neoplasia set up by Rasch and Gregersen was at first adopted

by Brocq and by him called *Néoplasie circinée benigne*, but the distinction from cases usually described as *Granuloma annulare* is at best but ill-defined.

In conclusion, it appears that the cases usually known by the name of *Granuloma annulare*, despite the various names which have been used to characterise them, form a group both clinically and histologically distinct. Without for a moment attempting to defend the name, or asserting that these cases correspond exactly to what are usually known as *granulomata*, I see no reason why this name should not in future be universally adopted to designate a well-defined group of skin-diseases. And this group should be held to include those cases of ringed eruption, which are usually found on the extremities, but may appear elsewhere, which are essentially chronic in development, which may or may not be preceded by an erythema, and which develop either centrifugally, or, more usually, by the coalescence of small nodules, until a ring is formed. The characteristic histological appearances of these cases have been described above, but the question as to whether they are essentially of hæmatogenous origin must be left open for the present.

ROYAL SOCIETY OF MEDICINE.

DERMATOLOGICAL SECTION.

MEETING held on Thursday, May 22nd, 1913, Sir MALCOLM MORRIS, K.C.V.O., President of the Section, in the Chair.

Dr. J. L. BUNCH showed a *case for diagnosis*. The patient, a man, aged about 45 years, had been in Trinidad, West Indies, for three years. While there he had two similar lesions to those now seen—one on the left thumb, and one on the left leg. They had retrogressed, leaving the slightly indurated, red patches now seen. Since the patient's return from the West Indies six months ago a raised, purplish, somewhat thickened lesion had made its appearance on the right forearm, which had increased in size, until it was irregularly circular, with a diameter of about 2 in. Three small sinuses were now present, two of which had only recently made their appearance, while the patient was taking iodide internally and applying lotio

nigra externally. There was also a small subcutaneous nodule above the elbow, which also involved the skin, but there was no reddening or discoloration of the skin over it.

Cultures made from the discharge from the sinuses did not grow a sporothrix, as was thought likely, nor did microscopic examination of the discharge show actinomyces or the bacillus of Hansen. This latter negative finding was of interest, as the patient had been thrown into contact with lepers, and a diagnosis of leprosy had been made by another physician, but there was no anæsthesia, the ulnar nerve was not thickened, and Dr. Bunch did not agree with such a diagnosis.

The possibility of tuberculosis had been considered, but the history did not point to it and the von Pirquet reaction was negative. The patient absolutely denied syphilis, and treatment with iodide and lotio nigra only resulted in the appearance of two fresh sinuses.

Dr. MACLEOD did not think a diagnosis could be made without a biopsy. He did not regard it as the grave disease which Dr. Bunch mentioned. The appearance of the case, he thought, strongly suggested some local infection, such as a streptothrix of the actinomyces type. Sometimes in actinomycosis it was extremely difficult to find the ray fungus. Therefore he suggested that in this case a search should be made for it in sections of a recent nodule or at the growing edge. Several varieties of streptothrix had been isolated in lesions of a similar clinical type.

Dr. J. J. PRINGLE was inclined to agree with Dr. MacLeod's suggestion that it might be a case of actinomycosis: the colour was very significant, and so was the haphazard distribution. It used to be said that actinomycosis was a disease which travelled "across country"; it followed no definite distribution of veins or lymphatics. In the present patient there were two patches on the arm and leg in no anatomical relation to each other. Dr. MacLeod's other remark that it was often difficult to prove streptothrix invasion by microscopic examination was also notoriously true, especially in patients who had been under treatment.

Dr. ADAMSON did not think the case could be actinomycosis, because it was very unusual for that disease to begin in the skin; it practically always involved the skin from some deeper structures. He thought it possible that it was a case of sporotrichosis; there had apparently been an abscess which had broken through the skin with multiple openings, in a manner very characteristic of sporotrichosis. He did not think a culture could now be obtained from the lesion on the arm, but it might be possible to get one from the unbroken nodule on the upper arm. The man might have been taking iodide of potassium, which would account for the healing up of the lesions on the leg.

Dr. PERNET said he did not regard the case as one of leprosy. The possibility of a streptothrix was on the cards. In a case of the late Dr. Radcliffe-Crocker's, Dr. Pernet had found streptothrix from an infiltrated lesion with soft fluctuating

points over the left hip. The streptothrix was characteristic—viz. mycelial elements, very numerous, aggregated here and there into felted masses, but there were no rosettes of clubs. Dr. Pernet exhibited the Gram eosin stained preparation before the Dermatological Society of London in 1905.¹ If the nodule in the present case were examined, something helpful to diagnosis might be found in it.

Dr. BUNCH replied that he had thought it was likely to be sporotrichosis, but he was disappointed to find the cultures did not grow. He proposed to excise a portion of the growing edge of the nodule. He gave the man iodide of potassium for a fortnight, without any appreciable effect. And this fact was not in favour of a diagnosis of sporotrichosis.

Dr. J. M. H. MACLEOD showed a peculiar case of *Lymphangioma circumscriptum* in a girl aged 6 years. The lesion was situated on the chest beneath the right breast, and consisted, at the time of exhibition, of a slightly raised, rounded, smooth swelling, about 2 in. in diameter. The skin appeared to be normal over the tumour, which was not definitely demarcated, but faded into the surrounding skin. On the lower part of the swelling there was a number of small clear vesicles varying from a pin's head to a split-pea in size. These were irregular in outline, and tended to form small clusters which had coalesced in one situation into a small bulla about the size of a large pea, which was uneven on the surface, as if it were multilocular. In the bulla and also in some of the vesicles the contents had become hæmorrhagic.

The history of the condition was as follows: The diffuse rounded swelling was noticed soon after birth, and had not increased to any extent with the growth of the child. Some time ago, before the patient came under the observation of the exhibitor, an incision had been made into the upper part of it and it was attempted to scrape it out. In this way the size of the lesion had been considerably reduced. The contents were said to be of a "fibro-cystic" character, but unfortunately had not been examined microscopically. There was no bleeding from the tumour. The description of the contents was suggestive of a cavernous lymphangioma. Until two years ago the nævus had given no trouble. One day about that time it felt hot and painful, and a crop of vesicles appeared, some of which in a few days became hæmorrhagic. In about a fortnight these had completely dried up, and formed scabs, which came off without leaving

¹ *Brit. Journ. Derm.*, 1905, xvii, p. 265.

scars. A week later another attack occurred, and it has been going on recurring almost every three weeks ever since.

The child's general health seems fairly good, and there is no other congenital anomaly present, nor history of such in the parents.

The PRESIDENT considered that it looked like lymphangioma. There did not seem to be any erysipelatoid condition.

Dr. F. PARKES WEBER thought that the subcutaneous tumour of the right mammary region, which was said to have a cystic fibromatous structure, was in reality a cystic lymphangioma. The cutaneous vesicles in the neighbourhood were probably superficial manifestations of the same lymphangiomatous growth. Hæmorrhage often occurred into the minute lymphatic vesicles of lymphangioma. In this case the hæmorrhage into the superficial lymphatic vesicles was perhaps the cause of the coagulation and scab formation. When the scabs thus formed were cast off, a fresh "crop" of superficial lymphatic vesicles would soon appear, which, in their turn, would be also transformed into scabs and thrown off, and so on, in periodic cycle.

Dr. DORE said he had treated a case of Lymphangioma circumscriptum (for Sir Malcolm Morris) with X-rays and it cleared up completely after several pastille doses.

Dr. J. M. H. MACLEOD also showed a case of pigmented nævi-like freckles in a girl, aged 16 years. The nævi were like large brown freckles, irregular in outline, about the size of a lentil, and distributed on the left side of the trunk, from the axilla to the buttock. They appeared five or seven years ago. In addition to the freckles there was a faint superficial capillary nævus on the right wrist and back of the hand, which had been noted at birth.

Dr. ADAMSON said he had shown an almost identical case of unilateral freckling, involving the same area, and had published a photograph of it. In that case there was a supernumerary nipple on the opposite side, a circumstance not very uncommon with unilateral segmentary nævus.

Dr. F. PARKES WEBER considered that the marbled red appearance of the skin at the back of the patient's right wrist (an appearance which could be made to temporarily disappear by friction) was an excellent example of congenital local "Livedo annularis" ("Livedo reticulata"), a condition intimately allied to ordinary capillary hæmangioma (telangiectatic areas) of the "port-wine nævus" kind.

Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.Ed., and Dr. S. E. DORE showed a case for diagnosis. Male, aged 52 years. Family history: Father died at the age of 64 years; mother, aged 84 years, still living; seven brothers and sisters, all healthy. Father and one brother suffered slightly from eczema, but no history of any other

skin disease. Personal history: General health exceptionally good; has been accepted as a first-class life by several insurance companies.

History of present condition: In February, 1912, he noticed a small red spot on the left side of the face, below the cheek-bone. The patch gradually spread and ulcerated, but no particular attention was paid to it. In the following April a similar patch appeared on the right cheek, which he thought had been inoculated from the other by shaving. At the end of May a third lesion appeared on the bridge of the nose, which became raised, thickened, and ulcerated like the others. In June he consulted a doctor, and a zinc ointment was applied. In July, during a holiday, the lesions improved without any treatment, and, in fact, nearly disappeared, but after he returned at the end of July several new patches appeared on the head and on the right shoulder, and these continued to increase in number and in activity. In December, 1912, his blood was tested for venereal disease with a negative result, but in spite of this an injection of salvarsan was given. After the injection his face swelled to twice its normal size within a week, and there was acute œdema under the eyes, so that he was only able to see out of one eye, and soon after fresh lesions rapidly appeared on the back, chest, arms and legs. In January, 1913, he went into a hospital, and was treated with a tar ointment and a lotion and a mixture. His condition remained stationary, and he then returned home, where he continued the same treatment, and also took hot sulphur baths. In April he underwent the "Rho Ray" treatment for seven days; this seemed to check the disease for a short time, but there was no permanent improvement. Since this time he has continued to use tar ointment, with the result that considerable irritation of the skin has been set up, but several of the lesions have disappeared.

Present condition: The lesions consisted of oval or circular slightly elevated plaques, distributed abundantly over the trunk, limbs, face and scalp. They varied in size from that of a sixpenny-piece to lesions as large as the palm of the hand, and there were also larger areas due to coalescence of the patches. The most characteristic lesions were of a pink or reddish-brown colour with marked "boss-like" central infiltration, gradually decreasing towards a clearly defined periphery. Some showed evidence of retrogression, one, particularly, having involuted for three quarters of its extent, leaving

a narrow semilunar patch. Another lesion showed a central patch with a concentric ring. A few showed a peripheral ring of scales with their free edges pointing towards the centre, but it was difficult to ascertain how much of the scaling and excoriation was due to the application of strong tar ointment. The face had a bloated appearance, caused by diffuse infiltration and œdema of the skin, and showed superficial ulceration and crust formation. The nose was bulbous owing to the presence of a prominent ulcerating lesion on the tip. The scalp presented a large scarred area on the vertex which was also slightly ulcerated and covered with crusts, and there were smaller infiltrations in other parts of the scalp.

Photographs of the case and microscopic sections will be published at a later date.

The PRESIDENT (Sir MALCOLM MORRIS, K.C.V.O.) added that there was glandular enlargement in various parts, especially the groins; but the general physical condition of the patient was good. Except for a spot on the shoulder, all the ulceration appeared to be due to the strong tar application he had been using. The itching was only slight. His own opinion was that it was lympho-sarcoma, in which case the outlook was not satisfactory. It was an interesting fact that following the one dose of salvarsan which he had there was great exacerbation of the condition. Still, there were apparently similar cases recorded in which arsenic had been beneficial. It was intended to make a biopsy, but he had only that day seen the case for the first time. There was thickening at the centre of the lesions, and withering at the periphery. One member thought Mycosis fungoides was excluded because there had been no itching, but he had seen cases of characteristic tumours associated with that condition in which there was no itching, though he admitted such were rare. Hence the presence or absence of itching could not be held to settle the diagnosis. Mycosis fungoides without a preliminary skin-lesion was very rare indeed. There had been no such skin lesions in this case. These tumours began in the face, and they had gone on steadily increasing ever since.

Mr. McDONAGH suggested that the case was one of Lymphodermia perniciosas. There was not much itching, and though the glandular enlargement was not at present great, he considered that as the disease progressed they would become greatly enlarged, especially the inguinal set. A portion of gland should be removed for microscopical examination, and also the margin of one of the lesions, as by this means it would make a diagnosis certain. With regard to treatment, he recommended a trial of benzol internally, as he had seen marked improvement following its use in these chronic lymphocytic affections.

Dr. WILFRID FOX agreed that a biopsy would be useful, and referred to an apparently similar case in which the diagnosis of Lymphodermia perniciosas was suggested; it proved, however, not to be so. But in that case the withering occurred at the centre, leaving a concave lesion. The patient died of sarcoma of the mediastinum three months after he was shown.

Dr. J. J. PRINGLE inclined to the opinion expressed by the President, with some reservation as to the use of the word "sarcoma." Cases of this class were described many years ago by Kaposi under the name of "multiple non-pigmented lympho-sarcomata." But the whole subject of the question of skin sarcoma needed revision. Microscopically, he did not know of any absolute distinctive criterion between skin granulomata and sarcomata. Mycosis fungoides of the Perrin type was a possible alternative diagnosis in the present case. In favour of the President's view was the complete absence of itching, and the fact that many of the tumours had withered spontaneously. The diagnosis might be much helped by the application of X-rays. If the tumours were to rapidly diminish under them, it would, he thought, tend to confirm the diagnosis of Mycosis fungoides. A very similar case which he had seen was X-rayed by Dr. Whitfield, and the ensuing improvement had been amazingly rapid and satisfactory; he did not, however, know the ultimate result of the treatment.

Dr. PERNET considered the case was one of Mycosis fungoides. In a case of Mycosis fungoides d'emblée, a drawing of which he had shown before the Section,* the patient was given salvarsan. The patient went from bad to worse, however. He had seen cases in which there was practically no itching. It was the long-standing pre-mycotic conditions that were so pruritic. In Mycosis fungoides even quite large tumours involuted spontaneously.

Dr. DORE said he remembered a case of multiple sarcoma of the skin which was also seen by Dr. Pringle and Dr. Whitfield, somewhat resembling the present one, except that there was some resemblance to a syphilide. He believed he improved on injections of soamin or orsudan.

Dr. MACCORMAC said that if sections of the condition were made, they should be stained for Altmann's granules. These granules were absent in sarcoma of the skin, but were present in Mycosis fungoides.

Dr. JAMES GALLOWAY said he was inclined to agree with the diagnosis of Mycosis fungoides. The absence of a prodromal dermatitis had been remarked on in this case, but he was not certain that, even if this were so, that it definitely excluded the possibility of Mycosis fungoides; and on examining the patient, rounded patches of inflamed skin, without noticeable infiltration, could be seen which might well be the prodromal lesions preceding the tumefaction noticeable in so many parts of the patient's body.

Dr. J. H. SEQUEIRA showed a case of *congenital hyperkeratosis of the hands and feet, etc.* The patient was shown as a companion to a similar case exhibited by Dr. Adamson at the last meeting of the Section. The child, a female, was aged 4 years, and the condition of the skin had been noticed soon after birth. There was an almost exactly symmetrical hyperkeratosis, chiefly affecting the limbs. The lesions were not scaly and there was no general ichthyosis. Both palms and soles were dry and of a brownish-black colour, the epidermis was obviously thickened, and the normal fissures of the

* *Brit. Journ. Derm.*, 1912, xxiv, p. 318.

skin were exaggerated. The pigmentation of the palms was deeper than that of the soles. The lower halves of both legs and forearms were similarly affected, the hyperkeratosis extending on to the dorsal aspects of the feet. Patches of normal skin were visible between the thickened areas on the extremities. The skin of the buttocks was dry and rough and slightly hyperkeratotic, and a similar condition extended for a short distance on to the thighs. Both sides and the back of the neck showed similar areas of horny thickening. It was noteworthy that the flexures of the axillæ and the flexor aspects of the elbows and the popliteal areas were all affected. The lower part of the back was dry and the skin was of a brownish colour. The front and back of the chest, the abdomen and the face were normal. The scalp was covered with fine brownish, branny, rather adherent scales, and the hair was thin and scanty.

The child was very small for her age, and her muscular development poor. She had never walked and was unable to stand. Her mental condition appeared to be normal. The abdomen was protuberant, but the liver and spleen were not palpable. The cutaneous condition has rapidly yielded to inunction of equal parts of lanoline and olive oil, and frequent baths.

It is interesting to note that the patient's mother, an unmarried woman was under the care of the exhibitor for secondary syphilis in November, 1912. She also suffered from infancy from an abnormally dry skin, the note made when she was under treatment being: The skin of both palms is dry and cracked, and the skin of the soles is also thickened and covered with tough, horny scales. Both legs from the knee to the ankle are covered with dirty brown to blackish scales suggestive of *Ichthyosis hystrix*. The edges of these patches fade away into the surrounding skin, which is xerodermatous. The elbows are covered with similar scales, and also the shoulders and anterior axillary folds. The flexures of the elbows, the loins, buttocks, and the spinal furrow are also dry and xerodermatous. The scalp shows a tendency to scaliness.

So far as could be ascertained no other relatives are affected.

The points of interest in this form of hyperkeratosis are the symmetry of the lesions, the involvement of all four extremities, and the marked predilection for the flexures. In these respects the condition differs essentially from *Ichthyosis hystrix* or *Nævus unius lateris*, and

from the universal form of ichthyosis, which affects the flexures less than other parts.

Dr. ADAMSON said the case he showed last time had one or two patches on the body also. These cases of localised ichthyosis he regarded as different from linear nævus; they were not warty but scaly. They differed also from generalised ichthyosis; in ichthyosis the palms and flexures were smooth. In this child there were patches on the flexor surfaces of the arms. He did not think the fact that the mother had ordinary ichthyosis meant that the daughter had the same complaint. Neither did he consider these cases of localised hyperkeratosis the same disease as congenital hereditary palmar hyperkeratosis (malady of Méléda). They need not be limited to nor even affect the palms or soles.

Dr. MACLEOD said that he considered that these cases were allied to congenital hyperkeratosis of the palms and soles, and that they belonged to a different category from ichthyosis.

Dr. J. H. SEQUEIRA also showed a case of *Lupus erythematosus*. The patient, a married man, aged 43 years, presented the common lesions of *Lupus erythematosus* in the butterfly-shaped patches across the face, with central cicatrisation and red scaly margins. There was also a small patch of exfoliation on the lower lip. The backs of the hands and the knuckles were the seat of red, raised, chilblain-like patches, which were always worse in the winter, and sometimes disappeared in the summer months.

The case was brought to show the extensive involvement of the lymphatic glands of the neck. In this region there was a chain of very large, softening glands extending almost from one ear to the other. There were also numerous scars of operations upon previously affected glands. In addition to this the patient had a dull patch over the left scapular region, and deficient breath-sounds were audible in the region. Two years ago he had hæmoptysis. There was no evidence of active phthisis now, but the patient had a slight nocturnal rise of temperature and sweating. The *Lupus erythematosus* had been present since the patient was aged sixteen.

The PRESIDENT remarked that if *Lupus erythematosus* was a toxæmia, the toxin was as likely to be that of tubercle as any other. But those who did not agree as to its tuberculous nature did not believe subjects of *Lupus erythematosus* were all tuberculous. At the time the Koch craze was at its height he gave many injections in cases of *Lupus erythematosus*, but a local reaction was never produced. One might see enlarged glands in this disease, but they were not necessarily tuberculous. It must be admitted that the pathology of *Lupus erythematosus* was not yet properly understood.

Dr. GALLOWAY said that he thought that the soundest position to occupy in the vexed question of the aetiology of Lupus erythematosus was that the lesions of the disease could be produced by more than one toxæmic process. Still, it was not to be denied that the coincidence of tuberculosis and Lupus erythematosus in the same individual had impressed many observers strongly with the idea that a causal connection between the two states of disease always existed. But Lupus erythematosus was associated with many other diseased states than tuberculosis. A case similar to the patient shown by Dr. Sequeira had been under his care till his death, which occurred a few weeks ago from subacute pulmonary tuberculosis. He had noticeable, though not extensive, Lupus erythematosus of the face and hands, associated with great enlargement of the lymph-glands in the neck, axilla, and elsewhere. The glands remained firm and large for so long that the case afforded a good text for frequent demonstrations of the differential diagnosis between Hodgkin's disease and enlargement of the glands due to chronic tuberculosis.

Dr. PRINGLE said he was and had long been of the opinion that the association of tuberculosis and Lupus erythematosus was much closer than most dermatologists could be brought to admit, and he was fully aware of the numerous and cogent arguments against his view. It had, however, been brought home to him, many years ago, by the greatest tragedy which had occurred to him in his professional life. During the early phases of the Koch craze dermatologists were maintaining that Lupus erythematosus was not tubercular or connected with tuberculosis. So repeated and assertive were the statements on the point that he gave a subject of the disease, an apparently healthy boy, an average dose of Koch's tuberculin, merely with the object of a negative demonstration to his class. As the result a latent focus of tuberculosis in him became extremely active and the lad died of acute tuberculosis in a few weeks. The impression made upon his mind was, naturally, a very deep one, and his subsequent experience had convinced him that his belief was not merely based on "the evidence of things not seen." If the aetiology of Lupus erythematosus could be reduced to one sole cause, he could not but believe that this cause was tuberculosis, although he had no theory to advance as to the intimate nature of the relationship.

Dr. AGNES SAVILL said she had had a case almost similar to that mentioned by Dr. Pringle, about six years ago. It was that of a patient at hospital with a very severe and extensive Lupus erythematosus on the face of many years' duration. Treatment by various physicians had done it very little good. She heard of tuberculin as a method of treatment and began with giving every two or three weeks for three months $\frac{1}{4000}$ mg. The Lupus erythematosus cleared up like magic; but about the sixth injection the girl manifested acute tuberculosis, for which she was taken into Brompton Hospital; she was dead in four months. The speaker had not used tuberculin since for Lupus erythematosus.

Dr. WILFRID FOX remarked that several people had written papers on the subject in which they pointed out that they did get reactions with Koch's original tuberculin. He agreed with Dr. Pringle that the tubercular was the most important and most frequent toxin found in connection with the disease. There was now a case at St. George's Hospital of Lupus erythematosus which had been treated in various ways by Dr. Freshwater. After two months the patient returned with a large gland, which on palpation was suggestive of a tuberculous gland.

Dr. ADAMSON did not consider the evidence for the tuberculous nature of Lupus erythematosus convincing. Both diseases were so common that it was not surprising that they sometimes occurred together in the same patient. The association of tuberculous lesions with Lupus erythematosus was certainly not so frequent as with the eruptions which we called tuberculides, *Acne scrofulosorum*, acnitis, Bazin's disease, etc. In a fatal case of acute Lupus erythematosus at St. Bartholomew's Hospital there was no post-mortem evidence of tubercle, and the patient died of acute pneumonia.

Dr. MACLEOD said that it seemed to him that the evidence was insufficient to establish a direct causal connection between Lupus erythematosus and tuberculosis, and believed that the association of the two was a coincidence, though he admitted that, being a weakening disease, tuberculosis might be a predisposing factor. He considered that there was nothing in the histology of Lupus erythematosus to suggest tuberculosis of the skin. Tubercle bacilli had never been found in the tissue, and inoculation experiments had invariably given negative results. This alone showed that it was not due to tubercle bacilli *in situ*. Nor was he convinced of the toxi-tuberculide theory of its origin.

MANCHESTER DERMATOLOGICAL SOCIETY.

ORDINARY MEETING, held Friday, May 29th, Dr. G. H. LANCASHIRE in the Chair.

Dr. R. B. WILD showed a case of ringworm in a man, aged 29 years. The patient works amongst cattle. Practically the whole of the right forearm and lower portion of the upper arm were covered with an eruption, dullish-red in colour, with well-defined slightly raised and serpiginous margin; scattered over the whole affected area were numerous pustules. The left forearm presented one round-shaped lesion, equal to half-a-crown in size, similar in character to those described on the right forearm. Scrapings from the margin showed mycelium and spores.

Mr. SAVATARD showed (1) *secondary syphilis complicated by diphtheria*. S. J.—, aged 32 years. When first seen she had a papulo-follicular syphilitic eruption (Wassermann reaction strongly positive). Ten weeks later she developed an ulcerated throat and was admitted to the Monsall Fever Hospital; a swab from the throat was examined and the case pronounced to be one of diphtheria. She was treated with antitoxin. The ulceration of the throat rapidly cleared, but the rash steadily increased in extent, and the patient was put on

antisyphilitic treatment for the last fortnight she was in the fever hospital.

(2) An *unusual congenital syphilide*. R. W—, female, aged 17 years. She was first seen in February, with what looked like a bullous staphylococcal dermatitis on both legs below the knee. She gave a history of twelve months' duration. There were numerous bullæ, with small shallow ulcerations. The teeth were slightly pegged and the nasal bridge depressed. The Wassermann reaction was negative. She was given 10 gr. of potassium iodide, but did not improve, although the pus elements disappeared under local antiseptics. The Wassermann test was again tried and was now positive. She was given 15 m of Donovan's solution three times daily, and this caused a rapid improvement.

(3) A *case for diagnosis*. J. J—, male, aged 18 years. A butcher's assistant with a pustular acneiform eruption on the back and a papulonecrotic eruption on the upper extremities. A film preparation showed the presence of staphylococci and a few acne bacilli.

Dr. LESLIE ROBERTS (Liverpool) considered the lesions on both arms and back as being staphylococcal in origin, whereas Dr. Lancashire thought it was impossible to exclude the possibility of the arm lesions being tuberculous in origin.

Dr. G. H. LANCASHIRE showed (1) *Henoch's purpura*. The patient was an anæmic girl, aged 10 years. The case was a mild but typical attack. When admitted to hospital four days previously she had a profuse hæmorrhagic eruption, mainly situated on the lower extremities; the upper limbs also showed a slight eruption. The day after admission she had an attack of diarrhœa with abdominal tenderness which persisted for two or three days, with slight pyrexia. She has had no symptoms of abdominal hæmorrhage and has not passed blood in her stools. The eruption is now rapidly disappearing.

(2) A *case for diagnosis*.—The patient, a middle-aged man, who had a history of syphilis contracted five years previously, and was still under treatment, presented numerous deeply pigmented scars scattered over the trunk and extremities, evidently the sites of healed gummata. On the inner aspect of the lower third of the left leg there was a plaque, oval in shape, equal in size to the palm of the hand, reddish-brown in colour, with numerous hard wart-like excrescences on the surface; between the excrescences there was some

ulceration, with slight fetid discharge. A diagnosis was offered of warty tuberculosis in a syphilitic subject.

One member expressed the opinion that the entire lesion was syphilitic complicated by pus infection.

On the following day 1 c.c. of 1 in 1000 Koch's tuberculin was injected. This was followed by a local reaction, and the temperature rose to 101.8° F.

Microscopic sections are being prepared and will be shown at a subsequent meeting.

Dr. WILLIAM DYSON showed a case of *multiple papillomata*. The patient, a male, presented numerous papillomatous pedunculated growths on the scrotum, in the groin and between the folds of the buttocks. There was no history of venereal disease and the Wassermann reaction was negative. The history given was that the eruption developed after profuse sweating whilst haymaking. The patient is a heavy beer-drinker.

TOUR TO FRENCH HEALTH RESORTS.

THE thirteenth tour to the Mineral Water Spas and Health Resorts in France will take place from August 25th to September 6th, 1913, under the personal direction of Professor Landouzy.

The health resorts in the south-west of France will be visited in the following order: Arcachon, Dax, Biarritz, Hendaye, Cambo, Salies-de-Béarn, Pau, Saint-Christau, Eaux-Bonnes, Eaux-Chaudes, Argelès, Barèges, Saint-Sauveur, Gavarnie, Cauterets, Bagnères-de-Bigorre, Capvern, Barbazan, Siradan, Bagnères-de-Luchon.

Full information will be given on application to Dr. Carron de la Carrière, 2 Rue Lincoln, or to Dr. Jouaust, 4 Rue Frédéric-Bastiat, Paris.

CURRENT LITERATURE.

CONCERNING THE SYMPTOMATIC DIFFERENTIATION BETWEEN DISORDERS OF THE TWO LOBES OF THE PITUITARY BODY. HARVEY CUSHING. (*Amer. Journ. Med. Sci.*, vol. cxlv, p. 313. March, 1913.)

THIS interesting and instructive paper was read at the discussion on internal secretions at a meeting of the American Medical Association, June, 1912, and not only indicates the results of the author's well-known work on the pituitary body (*The Pituitary Body and its Disorders*, Philadelphia, 1912), but makes an advance in the attempt to define the special functions to the anterior and posterior lobes of the pituitary body. Notice is also taken of the main results of the observations already made as to the functions of the other glands of internal secretion, especially of the thyroid gland. Full allowance is made for the close co-relation and possible supplemental or complementary action of the various structures producing these secretions, but the thesis underlying the paper is that "there exists a characteristic and recognisable syndrome for a primary derangement of each individual gland, whether on the side of its secretory over-activity, or of its secretory under-activity. Furthermore, in the progress of many of these disorders, transition conditions are to be expected, and if the constitutional derangement of an earlier state, let us say of over-activity, has led to fixed somatic changes, we may anticipate clinical combinations of the opposed states, the one due to a perversion or excess of secretion, and the other to a diminution or loss of secretion."

The writer thinks that the time has now arrived when, by more careful and critical study of the symptoms already recognised as being produced by disorders of certain of these structures, the functions and disorders of the rest may be more satisfactorily understood. The paper is devoted mainly to the study of the pituitary body, carefully differentiating its anterior and posterior lobes. Of these he says that "the strictly epithelial portion of the gland, or *pars anterior*, is a typical ductless gland, which discharges its secretion into the large sinusoidal blood-channels which traverse it. It is chiefly related to factors of skeletal development, and may be considered to elaborate a hormone capable of stimulating growth. On the other hand, the neuro-epithelial *pars posterior* is, in a sense, a gland of external secretion, its active principle or principles reaching the blood-stream by way of the cerebro-spinal fluid."

The symptoms associated with disorder of the anterior part are described under the name of the "acromegalic syndrome," with which the work of Marie is especially associated. The symptoms arising from the disorder of the posterior part are described as the syndrome of "dystrophia adiposo-genitalis," with which the work of Fröhlich is especially associated. The occurrence of cases in which both divisions of the gland are affected is specially noteworthy, as they present symptoms with peculiarly mixed characters. They are described in the paper as "the syndrome of overgrowth with adiposity." A deficiency of the secretion of the posterior lobe leads to a noticeable increase in the tolerance of sugars, with associated tendency to adiposity, a subnormal temperature, somnolence, dry skin, loss of hair, polydipsia and polyuria, characteristic psychic, often epileptiform disturbances—a sort of "pituitary myxœdema"; an excess of

the posterior lobe secretion, on the other hand, causes tissue waste, with loss of flesh, a relative intolerance for carbohydrates, often with spontaneous glycosuria, a moist skin—symptoms the reverse of those recounted above.

Noticeable secondary signs also are those associated with disturbance of the generative organs, an apparent activation when there is hypophysial hyperplasia, and unquestioned anaphrodisia when there is hypophysial hypoplasia, resulting either in failure in the complete development of the genital organs, or depression of sexual influences when development has occurred. It is possible that the relationship between the influences produced by the internal secretions of the pituitary body on the one hand and the genital glands on the other hand is more intimately associated with disorder of the posterior lobe of the pituitary than with its anterior part.

Three interesting cases are well recorded of the disorders mentioned :

Case 1 : A male, with adiposo-genital dystrophy with epilepsy and overgrowth.
Case 2 : A male, with general pressure phenomena, with secondary hypophysial symptoms, overgrowth, adiposity, sexual dystrophy. Case 3 : A male, showing overgrowth, adiposity and hypertrichosis.

The conclusions of this paper are summarised as follows :

"The view is advanced that skeletal overgrowth, possibly combined with certain cutaneous changes and hypertrichosis, is an indication of anterior lobe hyperplasia. On the other hand, certain types of adiposity with an increased assimilation limit for carbohydrates, often with dry skin, subnormal temperature and pulse, are characteristic of the metabolic disturbances from posterior lobe insufficiencies. Hypotrichosis and sexual dystrophy are common accompaniments.

"Assuming the combination of these factors, certain not unfamiliar clinical syndromes, in which overgrowth is associated with adiposo-genital dystrophy, can be explained."

These physical states are interpreted as the expression of an anterior lobe hyperplasia, combined with posterior lobe hypoplasia, or with what is in fact the same thing—stasis of the posterior lobe secretion.

The author remarks : "In varying grades the type is doubtless a common one, more or less familiar to all. One need but recall the fat boy depicted in the *Pickwick Papers*, whose employment with Mr. Wardle consisted in alternate eating and sleeping. The combination of drowsiness, inertia and an excessive appetite is often merely an expression of metabolic inactivity due to ductless gland insufficiencies."

J. G.

BROCQ'S DISEASE (ÉRYTHRODERMIE PITYRIASIQUE EN PLAQUES DISSEMINÉES). CALLOMON. (*Archiv f. Derm. u. Syph.*, December, 1912.)

THE author reminds his readers of the classical picture originally described by Brocq—the clinical signs, the chronic course, the slight response to all treatment, the possibility of spontaneous retrogression, and the differential diagnosis as especially emphasised in histological sections. In the case he describes the patient is a postman, aged 36 years, who noticed first in the summer of 1903, near the interphalangeal joint of his right thumb, a scaly red area. Further, such

areas developed in the latter part of that year, on the ulnar side of the left hand, the left leg, the right thigh and the back. These macular lesions resisted every treatment—baths (natural and medicated), chrysarobin, tar, sulphur—and their obstinacy led Harttung and Neisser to the suspicion of *Mycosis fungoides* (premycosis); this was in June, 1905. In 1906 arsenic injection were tried, without improvement, and during the next year radiotherapy under Dr. Putzler, of Dantzig, produced but little alleviation. All this time new lesions were appearing, and whilst they did not interfere with the patient's general health, prevented him following his occupation at times.

The state of the patient at this time (1911) is thus described by the author: Blood vascular, and nervous system normal; urine normal. Over the skin of the trunk are irregularly scattered, sharply defined, scaly, circular or oval, in places even linear lesions, mostly of a scarlet to livid or red-brown coloration. On the arms, near similar lesions are punctiform hæmorrhages, obvious on diascopy. The hairs in these regions have fallen out, and the skin over them, when palpated, is felt to be thickened and infiltrated—in other places atrophic and thinned. Some of the lesions are reminiscent of *Pityriasis rosea*. In size they vary from 19 by 10 cm. (on the thorax) to that of a crown (5s.) piece in the mammary and dorsal regions, the extensor surface of the arms, and the neck.

Röntgen exposures did not much benefit the condition in the author's hands, and this, he remarks, is a valuable point in the differential diagnosis from the premycotic stage of *Mycosis fungoides*.

About this time there were several intercurrent outbreaks of an acute eruption over the whole body, completely involving it in a few days and resembling somewhat the clinical picture of *Pityriasis rosea*. There had been attacks of this in the past, and the complete absence of any permanent relic of its attacks differentiates it from the genuine types of skin-atrophies. Still more specific is the histological picture, which is completely unlike that of the premycotic stage of mycosis, and rather resembles that described by Crocker under the name of *Xantho-erythrodermia perstans*, which latter, according to Callomon, in spite of the thickening of the skin described by the English author, deserves to be classed with Brocq's disease as a sub-type.

The outstanding features of the sections show (1) a close mononuclear round-cell infiltration confined to the stratum papillare and sharply demarcated from the stratum reticulare; (2) in the vicinity a marked hypertrophy of the connective-tissue cells; (3) very few mast-cells; (4) a complete absence of plasma-cells (*cf.* *Mycosis fungoides*); (5) marked œdema, spreading into the epithelial strata and leading to separation and rarefaction of the elastic fibres. In the epithelium the œdema is both inter- and intra-cellular, and in places intra-epidermal vesicles have made their appearance.

H. C. S.

MYCOSIS FUNGOIDES. TRYB. (*Archiv f. Derm. u. Syph.*, December, 1912.)

THE author presents a very detailed histological study of a typical case of his own and reaches certain definite conclusions.

In his opinion the disease is an *inflammation*, which always begins in the sub-papillary region. The inflammatory infiltration consists of certain cells—respec-

tively more or less numerous according to the stage of the process. In stage 1 he finds nothing but an increase of connective-tissue cells. Such a stage is found in the premycotic or very early mycotic phases. The oft-described plasma-cell is a *late secondary* phenomenon and is not specific by any means for Mycosis fungoides. Stage 2 shows transitional types from connective tissue to round-cell—the lymphoid variety with horse-shoe-shaped nucleus mostly—and in stage 3 we meet with the plasma-cell, so very characteristic of plasmoma, as, e.g., in syphilis.

This author maintains that Mycosis fungoides is not primarily a plasmoma, although in the late stages it may be described as such.

The vascular and endothelial hypertrophy, the oedema in corium and epidermis, the hyaline thrombosis and degenerative phenomena so commonly seen in the tumour-formation of this disease are all secondary, and probably only mechanical in origin.

The eosinophilia, described by Jadassohn and others, is admitted, but required special staining to bring out.

The author does not agree that it (*i.e.* eosinophile cells) occurs in the blood; in fact, he concludes his interesting summary by stating that the disease is one which plays its part entirely in the skin under otherwise perfectly normal surroundings. To the contention that the marked karyokinesis and karyorrhexis point to the neoplastic origin of mycosis, he denies that the appearances are any more characteristic of it than they are in any other rapidly developing inflammatory condition.

H. C. S.

THE ÆTIOLOGY OF MOLLUSCUM CONTAGIOSUM. KREIBICH.

(*Archiv f. Dermat. u. Syph.* (Referate), January, 1913.)

IN cases of the contagion in which the central pore or depression was obvious, this author has succeeded in finding spirochaetæ of the *refringens* type. His observations were confined to genital cases, and he believes the infection to be a secondary one, as they were not found in those lesions in which a central depression had not developed.

His method was to squeeze out the little plug of epithelial *débris* and examine in saline in the dark-ground microscope. He draws attention to the similarity of the culture media in Papilloma acuminata—the favourite abode of the *Sp. refringens*—and this condition. Levaditi's and Giemsa's stains were also used with success.

Two important questions arising from this discovery have not yet been answered: (1) Do the spirochaetæ occur in extra-genital cases of Molluscum contagiosum? (2) Can Molluscum contagiosum be thus secondarily infected with the *Sp. pallida*?

H. C. S.

HISTOLOGICAL AND EXPERIMENTAL INVESTIGATIONS ON THE CAUSES OF DEATH AFTER SALVARSAN. MARSCHALKÓ AND VESZPRÉMI. (*Archiv f. Dermat. u. Syph.*, 1912.)

THE authors first clear the ground by excluding cases definitely *post* as opposed to *propter* the administration. Only those deaths which followed one

injection in from three to six days with symptoms of meningitis or encephalitis are considered. In the actual case recounted by them in great detail these symptoms were most typical and outstanding throughout, but it is on the histological findings in the brain that they lay the greatest stress, and from which they draw conclusions of a very notable kind.

Macroscopically there were the usual punctiform hemorrhages, bilateral and symmetrical in distribution, and involving chiefly the corpus callosum, the cornua ammonis, and especially the pons Varolii, where the distribution of the extravasated blood, mainly in lines parallel to the upper surface, made it clear that the lesions must be due to a pathological condition of the pontine vascular supply.

Microscopically this was amply supported by the discovery of capillary hyaline thromboses and stases, and the presence of blood in the perivascular lymphatics.

Nowhere was there the slightest evidence of a round-cell or lymphocytic infiltration, such as would have occurred in an inflammatory reaction to a microbic or bacterio-toxic invasion.

There was no demonstrable injury to nerve-tissue.

The evidence, they maintain, is all in favour of a definite necrosis or poisoning of the endothelial capillary wall by the direct action of arsenic, the damage leading to thrombosis, and this in turn to stasis and diapedesis of corpuscles. The micro-histology of other organs did not throw any further light on the cause of death. In all of them, especially the lungs and kidneys, there was stasis and hyperæmia, but no thrombosis.

They cite three other fatalities in which the microscopic appearances were similar and confirmatory of their objection to the term "encephalitis."

Their animal experiments (rabbits) would seem to bear out the histological findings in man. By graduating the intra-venous dosage they were able to produce the identical symptoms—rigors, unconsciousness, tonic and clonic convulsions, and death in about three days—as occur in the human cases, and the dose which was able to produce the syndrome was 0.11–0.12 grm. per kilogramme. All animals into which more than 0.1 grm. per kilogramme was injected died without exception, and those getting 0.15 grm. or more in a few hours. In his original estimation of the doses tolerated for rabbits, Hata gives 0.1 grm.—a measurement which, according to the present authors, would appear to be too high.

H. C. S.

QUARTERLY SURVEY OF DERMATOLOGICAL LITERATURE.

ERYTHEMAS, INFLAMMATIONS, ETC.

Acanthosis Nigricans, Case of. H. G. KLOTZ and G. L. ROEDENBURG. (*Journ. of Cut. Dis.*, 1913, vol. xxxi, p. 306.)

Anthrax in Skins and Hides, Infectivity and Disinfection of. H. REICHEL and V. GEGENBAUER. (*Journ. State Med.*, 1913, vol. xxi, p. 193.)

Bagdad Sores, Case of. R. S. KEELAN. (*Indian Med. Gaz.*, 1913, vol. xlviii, p. 146.)

- Cutis Verticus Gyrata.** PASINI. (*Giorn. Ital. d. Mal. Ven. e della Pelle*, 1913, vol. liv, p. 36.)
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LITERARY NOTE.

MESSRS. SMITH, ELDER & CO. will publish on June 26th a work by Dr. W. McC. WANKLYN, who was formerly Medical Superintendent of the Smallpox Receiving Stations and River Ambulance Service of the Metropolitan Asylums Board, and is now an Assistant Medical Officer of the London County Council, entitled, *How to Diagnose Smallpox*.

The work is based on an experience of smallpox extending over twenty years, and including the revision of the diagnosis of upwards of 10,000 cases. It is intended for the busy practitioner and those who are not well versed in this disease. It is written in a clear and easy style, and deals with the subject in a practical manner. The work should be of special assistance in removing the doubts and difficulties which surround this thorny subject.

THE BRITISH JOURNAL OF DERMATOLOGY. JULY, 1913.

CASE OF ERYTHEMA INDURATUM GIVING NO EVIDENCE OF TUBERCULOSIS.*

By JAMES GALLOWAY, M.D.

THE question whether a constant relationship exists between the cutaneous malady recognised by the name of Erythema induratum and tuberculosis has been a frequent and instructive subject of discussion. In recent years the opinions of Audry, Thibierge and his collaborators, of Boeck, Phillipson, Walther Pick, and Kraus, may be referred to as having influenced the discussion in various directions. The whole subject has been carefully passed under review by Professor Jadassohn,† who has enriched his monograph with extensive references to the literature of the subject, and by Dr. J. H. Sequeira, who presents the different aspects of the subject in a very succinct form.‡

In our own Society the subject has frequently been discussed. The views of Dr. Colcott Fox, based on a wide experience and formally expressed at the International Congress of Medicine in Paris, 1900, and many times at our own meetings, have had great influence on our opinions. Dr. Arthur Whitfield's instructive papers read before the Society in 1905 and 1909 are also prominently in our minds, as they present a different aspect of the subject.§

* Read at the meeting of the Dermatological Section of the Royal Society of Medicine, June 19th, 1913.

† Jadassohn, in Mracek's *Handbuch der Hautkrankheiten*, 1907, iv, pt. 1, p. 446; also Wolff, *ibid.*, 1902, i, p. 577.

‡ Sequeira, in Allbutt and Rolleston's *System of Medicine*, 2nd ed., 1911, ix, p. 502.

§ Whitfield, *Brit. Journ. Derm.*, 1905, p. 241, and 1909, p. 1.

In 1899 I ventured the opinion that the cases of Erythema induratum included more than one type of disease, and that, at any rate, two clinical types should be distinguished, one of them characterised by a breaking down of the infiltrated tissue, and by the production of ulceration, the other in which inflammatory oedema of the skin was the more prominent lesion, and which rarely and only accidentally ulcerated. The opinion so stated was given in a somewhat dogmatic form, but it expressed the result of my clinical experience at the time, that all cases of Erythema induratum were not of tuberculous origin, and that different causes produced the different clinical types of the disease.*

The case reported in this paper is of interest because of the evidence it affords that, even when lesions of Erythema induratum contain areas of cellular infiltration, the newly formed inflammatory tissue need not be of tuberculous structure nor of tuberculous origin.

The patient, the subject of the following observations, is a woman, A. S—, who came under my care on admission into the wards of Charing Cross Hospital on April 17th, 1908. She has therefore been under close observation for five years; during this time frequent opportunities have occurred for observing the course of the cutaneous disease and the condition of her health in general. On admission the history obtained was as follows: Her age is 36 years. She is a short, rather stontly built woman of medium brunette complexion. She complains of being easily tired, and of suffering from palpitation and giddiness when attempting to do any household work involving slight exertion. She married at the age of nineteen, and during the whole of her married life she says she has been anæmic, and has had bad health.

On investigation the history of ill-health resolves itself into a description of almost constant difficulty in digesting food, and of troublesome constipation. For the relief of these symptoms she has frequently been under treatment by diet and by internal medicine, including the administration of purgatives. She states that three years previous to admission she had what was described as a gastric ulcer, and lived for three months on milk and light food. The evidence in favour of actual ulceration of the stomach is doubtful. Twelve years ago she had what was described as rheumatism, but this

* *Brit. Journ. Derm.*, 1899, p. 206.

also seems to have been of rather indefinite nature. The patient has had no children, and, so far as can be judged by her history, has not been pregnant.

On physical examination she is noted to have the appearance of a considerable degree of anæmia, the pallor of her skin contrasting forcibly with her dark hair and the bright red cheeks, which are characteristic of her complexion and normal in her case. In spite of a long history of ill-health she is stout rather than thin, and has not lost weight recently. The heart is slightly enlarged transversely, and a systolic murmur is heard over the cardiac region. This murmur was at first considered to be due to old endocarditis; it proved to be of functional nature, and disappeared entirely as the patient's health improved. A very slight degree of varix of the veins in both legs was noted. The urine was found to be normal on several examinations. No albumen or other morbid contents were present at any time.

Shortly before admission she commenced to develop purple patches and nodules on the legs and lower portion of the thighs, varying in size, but rarely more than one inch in their longest diameter. These caused some discomfort and pain, were slightly tender on pressure, and one or two about the knees, which had been rubbed by the clothing, showed superficial excoriations, but no deep ulceration. The patient was kept in bed, and under appropriate dietetic and nursing care and the administration of iron rapidly improved.

The following were the results of the examination of her blood on four occasions during her stay in hospital:

April 18th: Hæmoglobin, 48 per cent.; colour index, 0·57; red blood-cells, 4,220,000 per cubic millimetre; leucocytes, 4000 per cubic millimetre.

April 28th: Hæmoglobin, 58 per cent.; colour index, 0·68; red blood-cells, 4,290,000 per cubic millimetre; leucocytes, 5400 per cubic millimetre.

May 5th: Hæmoglobin, 74 per cent.; colour index, 0·7; red blood-cells, 5,200,000 per cubic millimetre; leucocytes, 6600 per cubic millimetre.

May 12th: Hæmoglobin, 70 per cent.; colour index, 0·7; red blood-cells, 4,860,000 per cubic millimetre.

The patient was discharged on May 17th, greatly improved in her

health, and more capable of doing work without being tired. She is able to digest food without pain; the constipated condition of the bowels was cured; the eruption of painful nodules on the lower extremities had ceased for the time being; those previously existing had healed or become absorbed.

This patient has remained under observation ever since leaving the hospital. Fortunately she has been able to live an easier life. Her husband obtained better remunerated employment, and consequently she did not require to work so hard. The tendency for the erythematous patches and nodules to appear has not ceased entirely, but this condition has never been so severe as before admission to the hospital in 1908. Occasionally, after attempting to do some more arduous household work than usual, one or two reddened, slightly painful and tender nodules will make their appearance under the skin of the calves or of the lower portions of the thighs. These will gradually disappear when she rests. Even a few days' rest in bed will cause the tenderness and pain to vanish from a recently formed nodule. The disappearance of the induration and staining, on the other hand, may not occur for some weeks or months. Within the last year the appearance of these lesions has become less and less frequent. It is now a rare thing for her to develop a definite hypodermic nodule, though patches of purplish erythema may be observed from time to time, lasting, it may be, for some weeks.

The patient has been admitted as an in-patient on two separate occasions subsequent to her first residence in hospital. On March 16th, 1912, she was admitted. A few nodules had recently appeared on the legs, and with the patient's consent it was decided to remove one of them for purposes of histological examination. One of the nodules was removed from the left leg, including the skin and subcutaneous tissue. She was again admitted on November 18th, 1912. On November 21st a von Pirquet's test was applied to the skin, giving a very slight positive reaction. On November 26th, $\frac{1}{1000}$ c.c. of old tuberculin was injected hypodermically at mid-day, the temperature being then 98.4° F. Hourly temperatures were recorded, showing a rise to 98.8° F. at 3 p.m., which fell to 98° F. at midnight. No constitutional or other disturbance was noted. On December 2nd, $\frac{1}{2000}$ c.c. old tuberculin was administered at 10 a.m., and two-hourly records of the temperature kept for twelve hours. The temperature, which

had ranged between 98° and 99° F. on the previous day, had the same range on the day of inoculation and on the day following, the lowest record being 98° F., the highest 99° F. On December 6th, $\frac{1}{1000}$ c.c. old tuberculin was injected. She was under close observation for the whole day, and no rise of temperature or constitutional reaction was observed. It should also be noted that no appreciable local reaction took place on any one of these three occasions at the point of injection.

The tissue which was removed on March 18th was divided into two portions, one of them being used for histological examination; the other half was sent to the clinical laboratory of the hospital for experimental inoculation. Dr. Topley has sent me the following report:

Report, July 2nd, 1912.—"On March 18th I inoculated a 450-grm. guinea-pig with 1.5 c.c. of a saline emulsion of the tissue removed from Mrs. S—, using the intra-peritoneal route. The animal gained in weight, and never showed any sign of disease. I killed it to-day, fifteen weeks after inoculation, and made a post-mortem examination. The organs were all perfectly healthy and there was nowhere the least sign of tuberculosis."

When removing the piece of tissue from the leg it was noted that the portion solidly indurated was small in comparison with the total area of tissue apparently affected by the lesion. The larger part of the lesion corresponding to the discoloured area evidently consisted of slightly congested and œdematous tissues.

On microscopical examination the area of cellular infiltration is seen to be situated mainly in the lower portion of the true skin, and extends downwards into the fat-containing areas of the subcutaneous tissue. One or two thin strands resembling in their structure the cellular characters of this "granuloma" extend upwards towards the epidermis, apparently along the lines of vessels or sweat-ducts; but the epidermis itself and the whole upper portion of the cutis is quite free from the underlying grannulomatous mass.

The cells of the granuloma are distinct, well formed and mononuclear, with a fair amount of surrounding protoplasm corresponding in type to "plasma-cells." These cells may be seen passing downwards into the subcutaneous tissue, surrounding and causing absorption of the fat-cells; in the densest parts the fat of the subcutaneous tissue

has entirely disappeared. In the looser areas the spaces occupied by fat-cells can be easily seen giving a spongy texture to the infiltrating mass. Very few, if any, polymorphonuclear cells can be observed in or surrounding the granuloma, and there is no sign of suppuration.

The tissue is noteworthy on account of the numbers of giant-cells it contains. These cells appear to occur in groups in certain areas of the granuloma, especially in the middle and lower parts, but they may also be observed scattered sparsely throughout. These giants-cells are large, exceedingly well defined, and contain large numbers of nuclei, which take the stain firmly and distinctly. These nuclei are frequently seen forming a girdle round the outer part of the cell. The well-defined margin of the giant-cells and their distinctness is a remarkable feature of the granuloma. The cells seem almost to be cyst-like, and in some places the manipulation necessary in preparing the microscopical sections seems to have detached the giant-cell from the surrounding tissue, turning it out of its place, or leaving a clear area between the wall and surrounding plasma-cells. The cells, therefore, are evidently bound down very slightly to the surrounding tissue, and do not form the centres of a system of epithelioid and other cells such as is so clearly the case in the giant-cell systems of the tuberculous granuloma. Throughout the whole area there is no sign of caseation and very little evidence of any other form of necrosis, even in the central protoplasmic areas of the large giant-cells.

The vessels in the immediate neighbourhood or involved in the granuloma show remarkable occlusion of their channels, owing to excessive thickening of the vessel walls. The impression produced at first sight suggests the obliteration occurring in severe degrees of syphilitic arteritis obliterans. The process of obliteration, however, differs from that of syphilitic disease in various respects. The thickening of the walls of the vessels is due mainly to a general infiltration of the external and middle coats by the same type of cells as is seen in the surrounding infiltration. These cells may be traced passing between the fibres of the vessel-walls in continuous lines from the tissue without. A considerable degree of proliferation of the intima may also be observed. The process is of more acute character than that seen in other forms of specific obliterative endarteritis. The venules are probably affected as well as the arterioles.

A number of sections were stained, and carefully examined for the

PLATE 1.

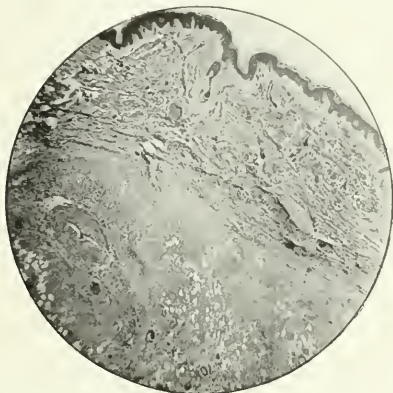


FIG. 1.—Low-power view showing the nearly normal skin, the area of lesion in the hypoderm, infiltrating the subcutaneous fat, the giant-cells in groups and an almost obliterated blood-vessel.



FIG. 2.—Higher magnification, showing the density of the infiltration, the large size of the giant-cells and their loose attachment.

TO ILLUSTRATE DR. JAMES GALLOWAY'S CASE OF ERYTHEMA INDURATUM
GIVING NO EVIDENCE OF TUBERCULOSIS.

PLATE II.



FIG. 3.—An arteriole showing infiltration of its outer and middle coats by the cells of the surrounding "granuloma" and proliferation of its inner coat.

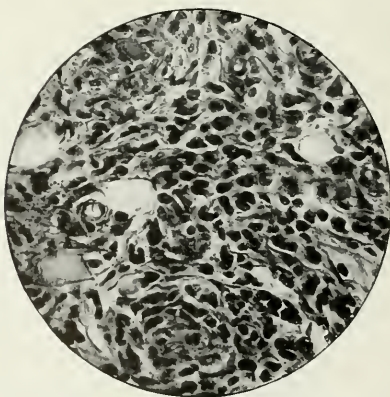


FIG. 4.—A higher magnification, showing the density and the character of the cells in the newly formed tissue; the absence of caseation is noteworthy and characteristic.

TO ILLUSTRATE DR. JAMES GALLOWAY'S CASE OF ERYTHEMA INDURATUM
GIVING NO EVIDENCE OF TUBERCULOSIS.

PLATE III.

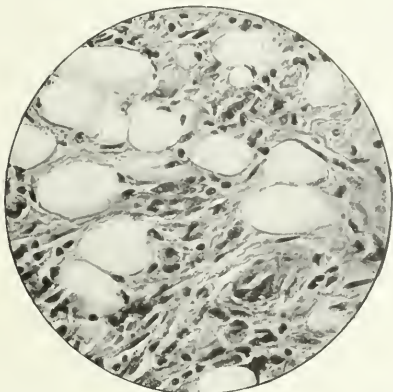


FIG. 5.—Shows the infiltration and absorption of the subcutaneous fat by the cells of the "granuloma."

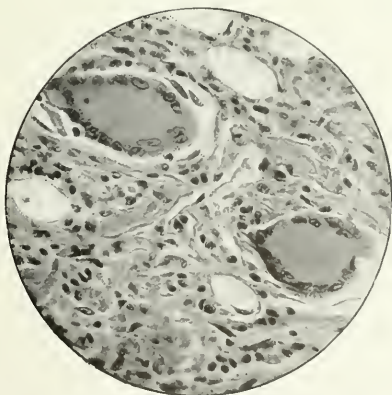


FIG. 6.—Shows two of the well-defined characteristic giant-cells and the position and arrangement of their nuclei.

TO ILLUSTRATE DR. JAMES GALLOWAY'S CASE OF ERYTHEMA INDURATUM
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PLATE IV.

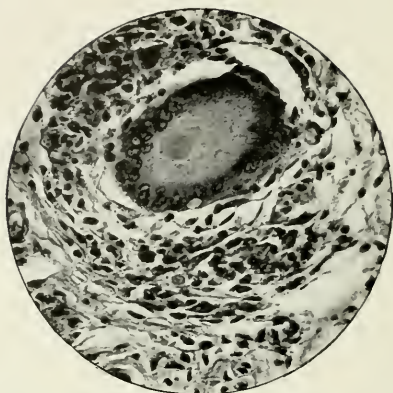


FIG. 7.—A giant-cell with surrounding cellular infiltration showing its loose attachment.

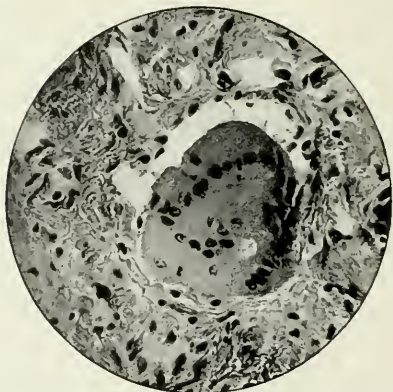


FIG. 8.—A giant-cell of a type less frequently present in the "granuloma," showing its loose attachment and easy displacement.

TO ILLUSTRATE DR. JAMES GALLOWAY'S CASE OF ERYTHEMA INDURATUM
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presence of tubercle bacilli by Dr. Walter MacLeod and myself, but none were seen.

There is no history nor clinical evidence of syphilitic infection, and the blood gives a distinct negative complement-deviation reaction to syphilis (Wassermann).

From the clinical aspect the following features are noteworthy in this case: An eruption of Erythema induratum appears on the lower extremities in a woman, aged 36 years, following a period of depressed health, of which the main feature is distinct anæmia of the chlorotic type. Notice must also be taken of the fact that indefinite, painful attacks, suggesting rheumatism, have occurred. This rheumatic condition is of doubtful ætiology, and no evidence of acute or simple rheumatism has been noted while under observation. The lesions, of which ten or twelve may have been reckoned at any one time during the earlier stages of the disease, are situated in the cutis and in the subcutaneous tissue. They are distinctly painful and tender on pressure. They are not only indurated, but show a considerable margin of purple, congested skin. Ulceration does not occur as a rule, and then only accidentally as the result of superficial abrasion. The ulceration does not pass deeply into the tissues; it does not spread but tends to heal. The lesions disappear, leaving small areas of pigmented skin, but scarcely any visible cicatrisation.

Under favourable conditions, especially of complete rest in bed, the eruption rapidly vanishes, and as the result of her general improvement in health the tendency for the eruption to recur has gradually become less and has now almost disappeared. No physical sign of tuberculosis has been observed, although the patient has been watched for over five years and has been carefully examined many times. A doubtful von Pirquet's cutaneous reaction was given, but a series of diagnostic tests carried out by means of Koch's old tuberculin gave an entirely negative result. There was no disturbance of temperature, no local reaction at the point of inoculation, and no reaction in the lesions of the lower extremities. The patient is now in better health than at any time since she first came under observation.

From the histological point of view the lesion shows in the centre of an area of slightly œdematous and congested skin a small mass of newly formed tissue of the nature of a true granuloma. This tissue is mainly composed of mononuclear cells infiltrating and causing

absorption of the fat in the subcutaneous tissue, pressing on, but passing only slightly into the cutis vera. The cells of the new tissue resemble mainly the mononuclear plasma-cell type; larger cells, however, may be observed, and among these are unusually large, well-formed giant-cells. These giant-cells resemble protoplasmic cysts and contain large numbers of nuclei, which are often arranged in a very characteristic form around the periphery of the cells. A considerable degree of fibrosis occurs surrounding and throughout the granulomatous area. The appearance of the granuloma differs in its general aspects from tuberculous tissue. The character of the giant-cells especially is different. They are evidently loosely attached to the surrounding granulomatous mass, and are unusually large and sharply defined. No tubercle bacilli were seen, and a considerable portion of the tissue inoculated into a guinea-pig did not produce tuberculosis.

The evidence therefore obtained by observation of this patient supports the contention that, in the malady usually described as Erythema induratum—Bazin's disease—there seem to be at least two groups of cases: One of them definitely tuberculous, giving tuberculous reactions, presenting or developing other signs of tuberculosis, and producing tuberculosis on inoculation into susceptible animals.

The second group of cases is not so well defined. Of these at least some, such as the case on record, develop a granuloma with certain peculiar features in the local lesions. The giant-cells, which form a striking feature of this granuloma, closely resemble those giant-cells described as being of the "irritation or foreign body" type, which may be seen in conditions having no connection with tuberculosis, and which appear also to be formed by the experimental injection subcutaneously of certain irritative materials, such as fatty acids and cholesterin.* The blood-vessels in these cases undergo inflammatory thickening of their walls with occlusion of their channels, resembling the obliterative endarteritis of syphilis and other specific granulomata; the vascular changes in the lesions now under discussion are, however, of a more acute character.

It is probable that other cases of Erythema induratum occur in which the local vascular changes are the most prominent features,

* Stewart, M. J., "On the Occurrence of Irritation Giant-Cells, in Dermoid and Epidermoid Cysts," *Journ. of Path. and Bact.*, 1913, xvii, p. 502.

and that these cases form connecting links between Erythema induratum on the one hand and the acute malady, Erythema nodosum, on the other. Such cases would present a close analogy to persistent forms of Erythema nodosum.

THE LATE SIR JONATHAN HUTCHINSON.

OUR readers will have learnt with regret of the death of Sir Jonathan Hutchinson, for many years our first authority upon syphilis, a great dermatologist, surgeon, ophthalmic surgeon and neurologist. He was born at Selby in 1828 and died at Haslemere at the ripe age of 85. It is interesting that two men of such eminence as Hutchinson and Lister came of old Quaker families, and that they should have been contemporary. Jonathan Hutchinson began his medical career by being apprenticed to Mr. Caleb Williams, a York surgeon, and in 1847 he entered St. Bartholomew's Hospital, qualifying M.R.C.S., L.S.A. in 1850. His first appointment was to the Blackfriars Hospital for Diseases of the Skin, and later he became Surgeon to the Metropolitan Hospital. In 1860 he joined the staff of the London Hospital as Assistant Surgeon, becoming full Surgeon in 1863. In 1883 he retired from the active staff and was appointed Consulting Surgeon and Emeritus Professor of Surgery, posts which he held until his death. In 1863 he became a Fellow of the Royal College of Surgeons, and later held office in the College as Examiner, member of Council, Hunterian Orator, and in 1889 he was elected President. In addition to the appointments already named, Hutchinson was for many years Surgeon to the Royal London Ophthalmic Hospital. He was also president of many of the medical societies, a Fellow of the Royal Society and corresponding member of foreign societies. He also sat on the Royal Commission on Smallpox and Fever Hospitals, and on the Royal Commission on Vaccination. He received the honour of knighthood in 1908.

Hutchinson's interests in his profession, as may be gathered from the appointments which he held with such distinction, were catholic. But in addition he was an enthusiastic naturalist, and provided excellent museums of natural history at Haslemere, where he resided for many years, and at Selby, his birthplace. A man of remarkable industry,

spending his week-ends in his Surrey home in his scientific pursuits, he became famous not only as a surgeon and dermatologist, but also as an ophthalmic surgeon and neurologist. It is not too much to claim that he extended our knowledge in all the branches of surgery and medicine which he took up, and this is recognised in the number of phenomena to which his name has been attached. In his work upon syphilis, however, he achieved the greatest eminence. His name will always be associated with the triad of symptoms met with in the later stages of the congenital disease, and his contributions to the study of lues in all its aspects only rival those of Fournier. The splendid advances which have recently taken place in syphilology may tend to overshadow Hutchinson's work in the minds of the profession of to-day, but we must not forget that many of his contributions were made half a century ago.

Hutchinson was a prolific writer, and his articles in the various systems are all of the highest standard, forcibly expressed, and with a wealth of illustration founded upon a unique experience. He was a most careful note-taker, and early recognised the importance of pictorially illustrating the rarer affections of the skin and obscure surgical conditions. The fruits of this painstaking work are seen in the series of volumes of his *Archives of Surgery*, which are a mine of interesting and carefully recorded cases, and in the wonderful collection of water-colour drawings and photographs now at the Polyclinic. In this connection may be mentioned his work as Secretary of the New Sydenham Society, whose publications included Hebra's standard work, as well as the important *Atlas of Skin-Diseases* and many papers and monographs of interest to dermatologists. His long advocacy of the theory that leprosy is due to the ingestion of decomposed fish is familiar to all. In pursuit of facts to support his contention he visited South Africa and India at an age when other men would have been content to enjoy a well-earned leisure.

As a teacher Hutchinson was unlike anyone else. He had such a storehouse of information upon subjects of natural history, as well as a remarkable memory of the cases he had seen in his enormous experience, that his lectures were always interesting and full of practical information. The writer remembers a fascinating and characteristic lecture given by him at the London Hospital on "Fairy Rings and Allied Phenomena." Beginning with an account of the "fairy rings"

seen in the fields, he led his audience through a vivid description of the ringworms and other ringed eruptions—a method of teaching which certainly had the advantage of attracting and holding the attention of his hearers. As a pioneer of post-graduate teaching in London, Hutchinson will always hold a high place. He began by building a museum at his house in Park Crescent in which he placed his huge collection of drawings and illustrations, and there on selected cases he for many years gave regular demonstrations and lectures to which all members of the profession were invited. The success of these post-graduate clinics led to the foundation of the Polyclinic, in which Sir Jonathan was assisted by the late Sir William Broadbent, Dr. Fletcher Little and others. Hutchinson advanced the money for the building and transferred to it his museum. For many years he lectured regularly at Chenies Street, and here, again, his teaching attracted large audiences.

Of his contributions to dermatology it is unnecessary to refer here, for they are quoted in every text-book and are familiar to all interested in this branch of medicine. We recognise that a great figure has passed from the scene, and that we shall not meet his like in the future. Modern research exacts such a development of specialism that we can never expect to see combined in one person the all-round excellencies of Jonathan Hutchinson.

CLINICAL NOTE.

A CASE OF DERMATITIS GANGRÆNOSA INFANTUM.

By A. H. H. HOWARD, M.R.C.S., L.R.C.P..

Sheffield.

ON March 7th I was called to see L. W—, suffering from chicken-pox. The child was a twin girl, aged 10 months.

She had just got over an attack of measles when she developed chickenpox. The child was rickety and in very bad hygienic surroundings.

On March 9th she developed some vesicles on the neck and cheek and behind the left ear. These increased in size to bullæ the size of

filberts, and some became pustular and were incised and fomented. Other bullæ developed later on the thighs and buttocks. Some formed dark—almost black—necrotic scabs, and under these were depressed, sharply defined ulcerated surfaces covered with purulent slough.

The temperature ranged at about 104° F., and was accompanied by marked wasting and very offensive diarrhœa.

An antiseptic lotion and ointment were applied, together with iron, quinine, and alcohol, and such supporting diet as the little patient could be induced to take, but in spite of these measures the child died on March 13th.

I regret that I made no examination of the bacterial contents of the bullæ.

ROYAL SOCIETY OF MEDICINE.

DERMATOLOGICAL SECTION.

MEETING held on Thursday, June 19th, 1913, Sir MALCOLM MORRIS, K.C.V.O., President of the Section, in the Chair.

Dr. H. G. ADAMSON showed a case of *recurrent nodular eruption of the hands and face for diagnosis*. The patient, A. S—, was an unmarried lady, aged 57 years. The eruption had first appeared twenty years ago, rather suddenly, during a visit to Oxford, and she had then attributed it to the place not agreeing with her. But the eruption had continued for twenty years, with intervals of freedom. It had always been better in the winter, and about ten years ago, after extraction of many stumps of teeth, it had disappeared entirely for two years. It usually got better when she took a mixture containing mercury and iodide of potassium. She had recently had swelling and pain in the left knee which had been diagnosed as rheumatoid arthritis and which had got well with ionic medication.

The eruption now present consisted of numerous dusky, red nodules on the face, neck, and hands and fingers. The nodules were scattered irregularly over these parts. They varied in size from that of a hemp-seed up to discs about $\frac{1}{4}$ in. in diameter. There were about a dozen on each hand and the same number on the face and

neck. Each nodule was raised (up to $\frac{1}{8}$ in. for the larger nodules), firm, dusky red, with smooth, shiny surface. On pressure the redness disappeared, leaving the nodule momentarily of a pale yellowish colour. There was no appearance of vesication, necrosis, pustulation, or crusting. On close inspection some of the larger nodules appeared indefinitely lobulated as though made up of separate smaller nodules, and some of them had a suggestion of a "ringed" appearance (like Granuloma annulare, but by no means so obviously ringed as the lesions of that disease). The nodules did not itch and they were not tender. Each nodule lasted about three weeks and then gradually faded, leaving no trace. There were no lesions in the mouth, but on the outer side of the left sclerotic there was a wide leash of congested blood-vessels passing over the cornea and dotted here and there with pin-head-sized opaque spots. This condition suggested a phlyctenular conjunctivitis, or possibly a miliary tuberculosis of the conjunctiva. Such appearances in the eye, sometimes in one eye, sometimes in the other, had been frequent, and until this attack they had disappeared on taking the mercury and iodide mixture. One other point to be noted was that the patient still had several teeth in the lower jaw which were loose and showed marked pyorrhœa at their bases. The exhibitor had never seen an eruption quite like this and was unable to recall any description of a case which corresponded with it. Perhaps the two eruptions which it most resembled were Granuloma annulare and Erythema elevatum dentinum of Crocker, and he was inclined to put it into the latter group, although the lesions in the case depicted by Dr. Crocker were much larger. He thought a drug eruption could be excluded. It seemed possible that both the "rheumatoid arthritis" and the eruption might depend upon absorption from the affected tooth sockets, and this view was supported by the fact that the eruption had previously disappeared for two years after removal of diseased stumps. But against this was the fact that pyorrhœa was so common, and this eruption was certainly unusual, if not unique.

Additional note.—Since the patient was seen at the meeting of the Section the eruption has almost disappeared and the conjunctivitis has cleared up. This took place after taking six doses of the mixture containing liq. hydrargyri perchloridi mxx, and potassii iodidum $2\frac{1}{2}$ gr. to each dose. After the first three doses the eruption began to

get pale, and there is now only a faint brown stain at the site of each nodule. This mixture was first prescribed six years ago, and it always has the effect of at once clearing off the eruption. Dr. George Pernet has kindly furnished the exhibitor with the note that Dr. Radcliffe-Crocker's diagnosis in 1893 was Erythema papulatum. Dr. Pernet saw the case in 1896, when the eruption was practically the same as when the case was exhibited at the meeting, and there was a phlyctenular conjunctivitis of both eyes.

Dr. WILFRID FOX thought it was a likely suggestion of Dr. Adamson that the condition was due to absorption of toxic products from defective teeth. He had seen a case with a similar sort of condition, long-lasting, and with a somewhat similar distribution, in a patient the subject of chronic staphylococcic bone disease, with slow necrosis and the formation of a sequestrum.

Dr. WHITFIELD said this case presented a new clinical picture in his experience; he had not seen anything precisely like it. If it had been acute he would have thought of Erythema papulatum.

Dr. S. E. DORE showed a case of (?) syphilide. The patient was a middle-aged woman, sent by Dr. Travers Smith. She had had the eruption for nine years. There was no history pointing to syphilis; she was the mother of six healthy children. Dr. Dore thought that it was a nodular serpiginous syphilide, but the Wassermann reaction was negative. He invited opinions as to whether this was one of the tertiary cases in which the Wassermann reaction gave a fallacious reading, or whether the diagnosis of syphilis was incorrect. That reaction was so often a reliable guide, that when it failed it was apt to lead to difficulties in diagnosis.

Dr. MACLEOD suggested that Wassermann's reaction might be tried again after an injection of salvarsan. He did not think the condition was tuberculous.

Dr. H. MACCORMAC showed a case of *Lymphangioma circumscriptum*. The patient was a male, aged 18 years. He had been born with a condition similar to the present, but this had been excised. Four months after the operation the disease had recurred, and had gradually increased and spread forwards. It now occupied a position over the left lower ribs measuring $4\frac{1}{2}$ by $3\frac{1}{2}$ in. and consisted of closely set vesicles from a pin-head to a hemp-seed in size. There were no associated blood-vessel changes, but a few warty thickenings of the skin were to be seen. There was a history of recurrent erysipeloid attacks.

Microscopical sections demonstrated that the condition was almost entirely confined to the papillary layer, where numerous large cavities lined by a single layer of endothelium were found. No relationship seemed to exist between these lymphatic spaces and the blood-vessels of the part.



The PRESIDENT said all the cases of the condition which he had watched—some of them for a considerable time—had gradually spread, and even surgical removal did not seem to be always efficacious. He saw Sir Jonathan Hutchinson's original case.

Dr. MACCORMAC also showed a *case for diagnosis*. The patient was a healthy man, aged 73 years. Fifty years ago he had had gonorrhœa, but there was no history of syphilis. He had been married forty-six years and had two healthy children. Fifty years ago he was frost-

bitten. Two years later he had an attack of what he calls scurvy, the left foot breaking out in ulcers and patches about the ankle; at the same time his gums were spongy, red, and bleeding easily. No drugs were being taken at this time. He recovered from this in about fifteen months, the ankle and foot healing completely, but leaving some scarring and pigmentation behind. The present condition began four years ago, when "little patches came out on the foot and ankle, with redness and swelling, and a discharge of black water." During the last year there has been a considerable amount of pain.

At the present time the foot and ankle are considerably swollen, and there are numerous sinuses from which a thin fluid flows, containing small masses of yellow pus. On the inner side of the foot there is a considerable thickening of the skin, with some deep ulceration; there are also many warty-looking papillomata. The whole condition bears a close resemblance to Madura foot, but no streptothrix has been seen in stained preparations, nor has any been grown. An X-ray photograph shows that the bone has not become involved. The blood-count showed some secondary anæmia. The Wassermann reaction was strongly positive.

Dr. J. H. SEQUEIRA showed a case of *Neuroma plexiforme*. The patient, a well-grown lad, aged 13 years, came to the London Hospital on account of numerous small swellings on the left hand. The parents, who are intelligent people, were certain that the swellings had not been noticed until about six years ago. The first area observed to be affected was the left thenar eminence, and at intervals similar lesions have been observed, first on the left index, the dorsal aspect of the thumb, and during the last twelve months others have been noticed on the second and little fingers, and on the flexor aspect of the wrist. There has been no pain or tenderness, but the spots are said to itch occasionally. There was no history of injury, and no other skin trouble.

The eruption consisted of small flat elevations the colour of the normal skin, hard to the touch, quite movable, and varying in size from a pin's head to a split-pea. On the left thenar eminence there was a ring of nodules the size of a two-shilling piece. On the left thumb there was a collection of small nodules on the flexor aspect at the junction of the first and second phalanges, and on the dorsal

surface there were a few similar elevations just above the nail, and some discrete linearly arranged lesions on the dorsal aspect of the second phalanx. On the left index-finger there was a line of small nodules extending from the metacarpal to the tip of the finger. On the radial and dorsal aspects there were small groups also. On the left middle finger, at the base of the first phalanx on the palmar surface, there was a small circular group of small nodules. On the little finger there was a nodule on each side of the palmar surface of the distal phalanx. On the ulnar side of the front of the left wrist there were three discrete nodules.

An accurate diagnosis was impossible, and one of the small growths was excised and sent to Dr. Turnbull for microscopical examination, and to him Dr. Sequeira is indebted for the following report: "The epidermis is quite normal, and shows short interpapillary processes. There is an abundant dense fibrous dermis, and in this are many large and several small, well-defined nerves. The nerves have a distinct peri- and endoneurium. The endoneurium is frequently thicker than normal, but the nerve-fibres are well developed and numerous. The arrangement of the nerve-fibres is more irregular than normal. The majority of the nerves are cut transversely. The arrangements of the segments of nerve in section suggest that the segments are sections of one or more tortuous nerves from which branches are given off."

The case is an unusual one, and appears to belong to the group associated with the name of von Recklinghausen, but the anomaly is here localised. It seems almost certain that it is of congenital origin, and this would account for the absence of pain in the lesions.

The PRESIDENT remarked on the absence of tenderness.

Dr. J. H. SEQUEIRA also showed a *case for diagnosis*. The patient, a lad, aged 13 years, came to the London Hospital on account of swellings on the third finger of the left hand. The finger appeared to have been normal to all appearances until the boy was aged five, when a small wart-like lump was noticed on the dorsum of the left third finger. This swelling was painted with iodine but did not disappear. Since then fresh lesions have appeared from time to time, and some even within the last twelve months. There was no history of injury and the lesions have been painless and free from itching.

On the third finger of the left hand, the skin over the second phalanx was slightly red and glazed, the whole phalanx being spindle-shaped. On palpation the swelling was found to consist of several small hard nodules, varying in size from a lentil to a pea. Three of these were on the ulnar side of the articulation of the first and second phalanges. Four nodules were grouped about the head of the second phalanx, and one large nodule at its base. Three nodules lay along the radial side of the same phalanx, and one on the palmar aspect. The nodules were distinctly subcutaneous, the epidermis over them was not movable apart from the nodules and had a stretched appearance. The nodules did not appear to be fixed to the bone. The general appearance of the finger suggested strumous dactylitis, but there had been no suppuration, and the swellings were discrete and hard. There was an enlarged gland at the angle of the jaw on the left side, and the boy had had double pneumonia when he was aged seven, but the swelling had been present before this. An aunt on the father's side had died of phthisis.

The exhibitor believed that the growths were fibromata, and this view was shared by several members present. A biopsy has been made but the report on the specimen is not yet to hand.

Dr. W. KNOWSLEY SIBLEY showed a case of *Nævus unius lateris with unusual effects of solid CO₂ (Dermatitis repens)*.—Patient is a well-developed, healthy-looking girl, aged 18 years, who had an attack of scarlet fever when aged five years, and after this her mother first noticed some "warts" on her right hand and side of the chest, which have persisted ever since and gradually increased. The lesions tend to form lines and the distribution is distinctly asymmetrical, the right side only being affected. A large group exists over the right breast and forms an irregular circle around the nipple. Considerable groups are present in the right axilla, from which three distinct radiating lines descend vertically downwards. Irregular groups are present below the inferior angle of the scapula, over the ribs; a very distinct band runs over the deltoid in a wavy curve across the scapula to about the middle line and in front extends over the deltoid down the upper third of the arms. Other less distinct bands are present about the anterior bend of elbow.

Under the microscope a section from one of the growths taken from

the axillary region shows hypertrophy of the prickle-cell layer, and the blood-vessels are surrounded with some cell infiltration. There is no thickening of the stratum corneum—that is, no hyperkeratosis: a typical acanthoma.

On March 18th, 1913, a stick of solid CO_2 , measuring 3 in. by $\frac{1}{8}$ in., was applied for one minute to a group of warts situated on the right breast, and afterwards the end of this was applied to four or five small spots in the front of the chest and in the axilla for a similar time. The usual blebs appeared a few hours afterwards and everything went on normally for the next week or so. On March 25th the patient had an attack of tonsillitis with a temperature of 103.6°F. , and on March 26th there appeared a sudden and rapid extension of the ulcerated surface wherever the solid CO_2 had been applied. The wound in the breast now presented a gaping, angry-looking mass of exuberant, fungating granulation-tissue measuring some 5 in. by 2 in., and those in the axillæ had become very deep and the muscles were exposed in the bases. The tip of a finger could be inserted for $\frac{1}{2}$ in. or more. The condition remained very resistant to treatment and took some ten weeks to heal up.

Cultures from the tonsils showed streptococcus and from ulcer of breast *Streptococcus pyogenes longus*, and she had some injections of an autogenous vaccine. No growth could be obtained from the blood, and a differential leucocyte count did not reveal anything abnormal.

As to the meaning of this ulceration: The patient shows some obvious neurotic phenomena—a certain amount of anaesthesia is present in the palate and some paranaesthesia over the regions where the lesions are present. She was at the time unable to differentiate when touched with the points of a pair of compasses, except at a distance of some inches. Dr. Sibley suggested that this condition might be a “Dermatitis repens,” as first described by Radcliffe-Crocker, and that here it has followed the same pathological conditions as a burn, merely a freezing process. It was believed that this disease results from peripheral nerve irritation, and that there is a secondary parasitic involvement of the part, an infective dermatitis, the traumatism being simply an initial factor of the process. The scars are now becoming of a keloid nature.

The PRESIDENT (Sir MALCOLM MORRIS, K.C.V.O.) said that he was inclined to think the case was one of congenital linear naevus.

Dr. WHITFIELD said he thought the condition was a systematised naevus, not warts, and he thought part of the result must be attributed to the very large area which was frozen by the snow at one time, and the unusual time during which the snow was in contact with the part. To apply a rod of such large area as $3\frac{1}{2}$ in. by $\frac{1}{4}$ in. for a minute to degenerate tissue was asking for necrosis to ensue. In the case of small hairy moles he had sometimes intentionally so applied the snow as to get a commencing necrosis, but he would not think of using such a large area for so long a time on any skin, except, perhaps, the palms of the hands or the soles of the feet, where the epidermis was especially thick. In this case he did not doubt that the freezing had been overdone. It was difficult to remove the papillary form of mole without causing severe scarring, because it was true papilloma.

Dr. SEQUEIRA said he was inclined to agree with Dr. Whitfield, both in regard to the diagnosis and the explanation of the phenomena which followed the treatment. There were points which Dr. Sibley raised in his remarks about the case which required some explanation. It was stated that the patient suffered from localised anæsthesia and from anæsthesia of the soft palate. He presumed the suggestion was that the patient was hysterical, and that probably the destructive nature of the lesion which followed the application of the snow was of a neurotic character. He would like to know whether it was suggested that there was an artefact element in the case. The streptococcal lesion in the throat was an unfortunate coincidence, but he did not think it could have any particular effect on the nature and the healing of the wound. He agreed with Dr. Whitfield as to the extraordinary difficulty in removing these conditions by means of CO_2 snow; if that were used, it must be pressed to a considerable extent so as to produce deep reaction. He rarely advised such treatment for these conditions.

Dr. SIBLEY replied that the mother declared that nothing abnormal appeared there until she was aged 5 years, but of course such conditions were sometimes present without their having been noticed. Previously to this application for one minute, the area was painted with ether and CO_2 , and with practically no result. One minute he did not regard as severe; for lupus he had applied the snow for two or three minutes and over very much larger areas than in this case, using quite firm pressure, yet he had never before had such a result as seen here. On a future occasion he would be pleased to show a small boy with lupus in whom large areas had been frozen for three minutes and with most satisfactory results. He considered there was something very unusual in the condition of the tissues of this patient.

Dr. SIBLEY also showed a case of *Psoriasis and Pityriasis rubra pilaris*. On March 20th, 1913, a boy, aged 6 years, was sent to him by Dr. McHugh with a history that he had had a rough, dry skin for some five weeks, and that the present condition has been present for three weeks and came on more or less suddenly. On inspection the whole face and scalp were covered with a mass of heaped-up dry scale, of such a thickness that the boy could not open his mouth and hardly separate his teeth. There was a fairly well-defined margin to the

exuberant scaly condition, and the same excessive dry, heaped-up scale formation was present to the same extent over the whole scalp. The arms, forearms, hands, thighs, legs and feet were all covered by scale of moderate degree, which was especially abundant and heaped-up over the patellar regions. The palms and soles were also affected, and showed a general thickening or keratosis, rather than any distinct eruption. Over the trunk what appeared to be a distinct guttate psoriasis was abundantly present. With the exception of the scalp there did not appear to be any marked affection of the hair-follicles.

Under the microscope a section of one of the lesions taken from the dorsal surface of the forearm showed a fairly typical psoriasis lesion, marked hypertrophy of the horny layer, with flat, horny cells (parakeratosis), and atrophy of the stratum granulosum. The stratum mucosum was very much thickened, the hair-follicles were filled with horny material, the papillary blood-vessels were dilated, and the other vessels were surrounded with round cells and leucocytes.

The child looked distressed and ill; the temperature varied from 99° to 100° F., and he complained of pains, especially about the flexures of the elbows.

In a few days the whole body presented the appearances of an acute exfoliative dermatitis, or Pityriasis rubra, and in some two or three weeks the excessive scaly condition had separated from everywhere with the exception of the scalp, where the presence of the hairs prevented its removal. At this time the scalp presented a very unusual appearance of deep furrows and heaped-up ridges.

Dr. SIBLEY added that the first diagnosis he made was psoriasis on an ichthyotic skin. A section under the microscope at this stage was of typical psoriasis. The section was taken from the dorsal surface of the boy's forearm, and it did not show any marked hornification in the hair-follicles; the present hair-follicle condition had appeared since he last saw the case about a fortnight previously. There was some thickening of the palms and soles.

Dr. J. J. PRINGLE could not accept the exhibitor's diagnosis of the case, which he considered to be a typical example of Pityriasis rubra pilaris in process of spontaneous recovery.

Dr. ADAMSON agreed with Dr. Pringle in the diagnosis of Pityriasis rubra pilaris. It was a typical example of Pityriasis rubra pilaris. The boy also had psoriasis. As the speaker had pointed out on several occasions, the association of psoriasis and Pityriasis rubra pilaris was not infrequent. Indeed, he believed that Pityriasis rubra pilaris was really a phase of psoriasis—a follicular psoriasis. The case of F. C—, aged 7 years, shown by Dr. Adamson in May, 1911, and again by Dr.

Sequeira in June, 1912, was an example of alternating psoriasis and Pityriasis rubra pilaris.* Dr. Whitfield had also shown a case in a child, aged $4\frac{1}{2}$ years, in which the eruption at one time took the form of follicular psoriasis and at another that of Pityriasis rubra pilaris,† and Dr. Little had mentioned a case of pityriasis rubra pilaris in which the sister had psoriasis.‡ The behaviour of Pityriasis rubra pilaris was like that of psoriasis in its tendency to spontaneous cure with relapses.

Dr. WHITFIELD was in partial agreement with Dr. Adamson's remarks. He said that some years ago Dr. Poynton showed two cases of Pityriasis rubra pilaris, other members of the same family having had psoriasis. Several such cases were on record. Pityriasis rubra pilaris did not react to treatment like psoriasis, and although he thought the two diseases were related, he did not consider them identical.

Dr. J. M. H. MACLEOD expressed his agreement as to the combination of the two diseases in one patient, but he regarded Pityriasis rubra pilaris as a separate disease from psoriasis.

Dr. GRAHAM LITTLE had had a case of Pityriasis rubra pilaris of many years' standing in a young girl, whose sister he had also seen: the latter had typical psoriasis. Dr. Little could not agree with the opinion that Pityriasis rubra pilaris and psoriasis were the same affection; their behaviour under treatment and the distribution and character of the lesion were markedly dissimilar.

Dr. PERNET also considered that Pityriasis rubra pilaris and psoriasis were different conditions. This was especially so in adults, he considered.

Dr. A. WHITFIELD showed a case of *Lichen planus of the tongue and lips*. The patient, a young man, first noticed a small grey patch on his tongue at Christmas, 1912. This spread until the whole surface of the tongue was involved, and two months later he developed "eczema" of the arms and legs. When shown, the tongue was evenly grey in colour to the naked eye, but with a lens this greyiness could be seen to be formed by fine white stippling. The insides of the cheeks showed the common white "embroidery" of Lichen planus, and there was a similar condition of the dry mucous membrane of the lips. On the flexures of the elbows, the groins, the outer sides of the trochanter and the body of the penis (not the glans) there were numerous typical domed papules of lichen. Some, but not all of these, were circumpilar in origin and their grouping was rather unusual in character, being distinctly corymbose in arrangement.

Dr. Whitfield said that lichen on the mucous membrane of the cheeks was very common, but he thought such extensive involvement of the tongue and the dry part of the lips was unusual. The rash was

* *Brit. Journ. Derm.*, xxiii, p. 181. and xxiv, p. 280.

† *Brit. Journ. Derm.*, xiv, p. 470, and xvi, p. 462.

‡ *Brit. Journ. Derm.*, xii, p. 92.

not very irritable and was already undergoing an involution after a three weeks' arsenical treatment.

The PRESIDENT remarked that the appearance of Lichen planus on the mucous membranes before coming on to the skin was commoner than was generally supposed. And one could not safely generalise on the symptom of itching, because in some undoubted cases itching was severe, whereas in others there was scarcely any irritation.

CURRENT LITERATURE.

PSORIASIS: ITS HISTOLOGY AND PATHOGENESIS. HASLUND.

(*Archiv f. Derm. u. Syph.*, December and February, 1912-13.)

IN a treatise occupying fully sixty pages of the December issue and fifty-four pages of the current issue of the *Archiv f. Derm. u. Syph.*, the author exhaustively, and with the help of twenty-four well-executed plates illustrating his research, describes the present histological and bacteriological position of this puzzling disease. There is nothing strikingly new in his detailed account, and it is proposed to give here only a short summary of his lengthy conclusions.

He looks upon psoriasis as a rhythmically recurring "suppuration" in a constant situation, viz. the uppermost layers of the epidermis, the minute abscesses which constitute it being microscopical and not visible to the naked eye. These abscesses were first described by Munro and Sabouraud, and are only obvious in very early stages of the disease, in which they are invariable and specific. The oft-described para- and hyperkeratosis, acanthosis, etc., so typical in histological pictures of the condition, are purely secondary, and represent merely the reaction of the local environment to the irritation of a still unknown factor, in the author's view, probably microbic. The invasion of the epidermis by leucocytes is always the first and most prominent feature of the microscopical findings, and although these emanate from the papillary body at numerous points, the evidences of affection of the latter to any marked degree as a primary cause of the migration of these cells to the surface are very sparse indeed, and the author very rarely finds vascular dilatation or cellular exudate in the corium.

These points are well illustrated in the admirable micro-photographs of the February number, plate xxix being especially worthy of study.

Fig. 9 on plate xxiv gives an excellent reproduction of three microscopic abscesses immediately under the classical psoriasis scale, and fig. 10 of the same plate shows one on its journey to the surface.

In his *resumé* of the bacteriology of psoriasis he quotes a number of investigators and their conclusions, e.g. Unna and the morococcus, but, whilst stating his belief that psoriasis has a bacterial cause, he is in agreement with the majority in his conviction that the true micro-organism has yet to be discovered.

H. C. S.

A CLINICAL AND EXPERIMENTAL INVESTIGATION ON THE QUESTION OF THE SEBACEOUS SECRETION OF THE BODY.

KUZNITZKY. (*Archiv f. Derm. u. Syph.*, February, 1913.)

THE writer's results do not tally with the recorded weekly and daily records of other investigators. Krukenberg, who obtained his totals by estimation of a

small area, and subsequent multiplication for the whole body area, gives a daily excretion of 40.8 grm. Leubuscher modified his methods, and estimates the daily output at 15 grm. The author and other writers have criticised these widely differing results, and explain them on the grounds of crude and faulty technique. The writer used for his experiments woollen underclothing, previously extracted with chloroform until the extractable fats present in them were diminished to .002 grm. They were then dried and put on, and worn by the author and two colleagues night and day while the experiments lasted. The following figures were obtained. The daily secretion averages between 1 and 2 grm. and is fairly regular. During the winter (and in children) it is diminished.

The influence of diet was not so marked as other investigators have found, but carbohydrates undoubtedly stimulate the secretion, as compared with a diet rich in fats.

An important discovery is that bromides diminish markedly the sebaceous output. In his own case the author found that the normal weight of excretion of 1.23 grm. *per diem* was reduced to 0.73 grm., during daily doses of 4-5 grm. of bromide, and that on omitting the drug the return to normal was very slow. He developed severe acne meanwhile, and deduces from his experience and results that the acne originates as a result of a diminished secretion of the antiseptic sebum. Sebum is a bad medium for the growth of bacteria (Linser); it may even be bactericidal. He suggests, therefore, that a diminished sebaceous excretion may predispose to acne and furunculosis. On these lines can be explained the experience of Czerny, who gave large doses of cod-liver oil to tuberculous children, and apparently produced in every one of the cases treated marked "eczema" of the face and head. That patients with acne are commonly the subjects of Seborrhœa oleosa is not denied by the writer. He would explain their oily appearance by postulating a dilution and liquefaction of the sebum, possibly through absorption of water, for sebum, and the allied fatty bodies (*e.g.* lanoline) are conspicuous for their hygroscopic characters (Linser). In support of this theory Kunitzky found that the proportion of face to body sebum in these cases was not increased. That the secretion of sebaceous material has an antiseptic action is also suggested by the rarity with which certain dermatomycoses (*favus* and ringworm) attack individuals past their puberty, the onset of which is commonly also the signal for a spontaneous cure in infected subjects.

H. C. S.

TRICHOSTASIS SPINULOSA. NOBL. (*Archiv f. Derm. u. Syph.*, February, 1913.)

UNDER this title Prof. Nobl gives a clinical and histological description of a condition which at present finds no place in the text-books. Six cases are described, all males, and varying in age from sixteen to sixty-two. All of them came for the treatment of other conditions, for this abnormality causes no symptoms. It consists briefly of scattered collections of minute spines, congregated mostly on the neck and shoulders, and not involving the extensor surfaces of arms and thighs—the seats of predilection of other types of follicular keratotic conditions. The spines, which are clearly visible to the eye, but not perceptible to touch, vary in projection above the surface of the skin from 1-3 mm. They are dark-coloured, and under low magnification are seen to consist of bundles of

very fine dystrophic hairs, '011 to '020 mm. in thickness, and ten to fourteen in number. The ends of some of them are fissured.

The structural arrangement of these hairs shows clearly that they have each originated from one hair-follicle, the mouth of which is enlarged, funnel-shaped, and enclosed by an excessive deposition of lamellated horny corneous layer. The follicle itself is sometimes very short, and sometimes grows into the subcutaneous layers, whilst below the neck it is obviously swollen beyond its normal size, and surrounded by a very obvious and irregular horny cuticle.

No evidence of inflammatory reaction was obtained in any of the specimens.

The author considers the condition to be the result of an inhibition of the growth of fine lanugo hairs in the follicle. The death of these, with hyperkeratosis, the result of irritation to a foreign body, and the production in regular sequence of new hairs, explains fully the clinical picture and the histological findings (plates i-iv) he has described. He looks upon it as a congenital anomaly.

H. C. S.

ALOPECIA AREATA: A STUDY OF ITS ÆTIOLOGY, AND THE RESULTS OF SOME EXPERIMENTAL INVESTIGATIONS WITH THALLIUM SALTS. PÖHLMANN. (*Archiv f. Derm. u. Syph.*, February, 1913.)

THE author first reviews the reports of the published epidemics of the disease in schools, asylums, barracks, etc. Of particular interest among these, as evidence for its contagiousness, is the paper by T. Mayer on an epidemic among thirty-five policemen, of whom twelve were attacked, and, curiously enough, just in those situations which are most apt to rest on the pillow in sleep. There was no doubt in this instance that the men, owing to shortage of accommodation, had been in the habit of sleeping in whatever beds were vacant at the time. German and French epidemics and the historical English outbreak (Bowen) in a girls' home are also fully described. In support of the parasitic nature of the disease must be noted those cases among near relatives; but on the other hand, he observes, this familial infection is not very common, and its comparative rarity is used by many as an argument against the theory. Epidemics, of course, labour under the suspicion of having been some form of ringworm, impetigo, etc. (Crocker, Abraham and Hutchinson), pseudo-pelade of Brocq, etc., and the possibility of such error must not be lost sight of, though Lesser, in his new text-book, calls attention to the fact that among those who had described epidemics were many of the greatest authorities and scientific investigators in dermatology.

In support of the tropho-neurotic theory are quoted the classical experiments of Joseph, who produced typical circular bald patches by excision of the second spinal ganglion and section of certain cervical nerves peripheral to the ganglion in cats and rabbits. The results were confirmed and denied with equal vehemence by other operators, but Köster, who has recently repeated the work in full, has shown that they are not constant, and seem to depend largely on the well-known habit of the cat (apparently increased by the operation) of rubbing its fur against projecting articles; on the other hand, several animals which were always doing this did not loose their hair. Whatever be the explanation, there are many recorded cases of damage to nerves during operations, traumatic accidents to the

skull or cranial nerves, etc., in which alopecia followed too readily to be explicable on the grounds of a simple coincidence.

Similarly difficult of explanation, except on a trophoneural basis, are those cases of alopecia closely following on some acute mental shock; of these there are numerous examples constantly occurring in the literature. Summarising this part of the subject, the author cannot accept the theory of Joseph, deduced from his operative researches, in his (Joseph's) original sense, but he admits that every now and again there occur cases of traumatic and neurotrophic alopecia which cannot be clinically differentiated from the typical cases so commonly met with in daily practice. Sabouraud's latest theory would attempt to class Alopecia areata as a hereditary disease. This explanation can also not be accepted, for the history in a parent or an ancestor of baldness, as given by the patient, can be explained on so many different bases, as, *e. g.*, ringworm, syphilis, favus, pseudo-pelade of Brocq, etc., that no conclusions of any value can possibly be reached by the investigator. Jacquet's theory of dental caries as the primary factor must also be discarded. It has been repeatedly found that the tooth affected and Head's areas do not correspond; moreover it would be very difficult to explain away the universality of dental caries and the comparative rarity of Alopecia areata, and a similar objection must be urged to another theory of Sabouraud's which would place certain severe cases of the malady in a syphilitic category (hereditary and tertiary). He explains the positive W.R. found by Du Bois in eleven such cases out of fourteen examined merely as "pelade" occurring in syphilitic subjects.

The author turns now to the latest theory—that of an auto-intoxication—and there is no doubt in his mind that the majority of cases can be explained in this way. He refers shortly to the work of Buschke and Bettmann, who produced areata-like falling of the hair in animals by internal administration of thallium acetate, and to that of Sabouraud, who produced baldness in ringworm cases by local application of a thallium ointment (20 per cent.)—not without dangerous collateral symptoms, *e. g.* gastro-enteritis, albuminuria and pareses.

He then describes his own experiments on mice and rats. The former soon succumbed, even to very dilute solutions administered in the food, *i. e.* a daily dose of .0004–.0008 grm. in aqueous solution. Rats were then used, and after a few trials the author found no side-effects with 1–3 c.c. of a 1:5000 aqueous solution administered on two definite days in the week. The slightest ill-effects, as, *e. g.*, intestinal catarrh, were the signal for immediate cessation of administration for the time being.

In three to four weeks at earliest the hair began to fall out, and always only on the head and back, sometimes on the fore-limbs, and never on the abdomen. The type of loss was sometimes in the form of a diffuse thinning; at other times it appeared as areata-like bald patches, and at others, again, in the form of a narrow band of baldness from eye to ear. In some animals fed in this way for three months there occurred total baldness of the head, back, and fore-limbs.

Histologically, nothing whatever abnormal was found either in the hair itself or in the skin constituting a bald patch; nor was there any suggestion of hyperæmia or exudation in the neighbourhood of the papillary body or hair-follicles.

Local application of the drug in an ointment (20 per cent.) has been tried by Vignolo-Lutati, Nobl, and Sabouraud, and in their later attempts with success,

although the first experiments were followed by intoxication and death through the skin-absorption or licking of the inoculated places. The hair grows again in from two to four weeks.

The author concludes that thallium must be looked upon as a specific poison for nerves, being, as a matter of fact, very closely related in all its biological actions—even to the production of alopecia—to lead. In his experiments on man Lutati found that the drug used in moderate quantities as a local application on healthy individuals had no action, but in two favus cases it produced serious toxic symptoms.

The following are his final conclusions:

- (1) Alopecia areata is not a clinical entity.
- (2) Although most cases can be explained by the assumption that a contagium of some kind is transferred from one susceptible subject to another, there are cases—
- (3) As, for example, those following mental shock, where such an explanation is beyond the bounds of possibility: and—
- (4) There are some few cases as, *e.g.*, those that can be produced by thallium, which are probably caused by a toxic agent.

H. C. S.

URTICA SOLITARIA. VORNER. (*Derm. Zeitschr.*, January, 1913, p. 1.)

DR. VORNER calls attention to the fact that patients who at one time have been the subjects of typical urticaria, after they have ceased to suffer from wide-spread outbreaks of the eruption occasionally exhibit single wheals. These single wheals must be the remains of an earlier pathological condition; the same circumstances which previously provoked a number of efflorescences subsequently give rise to a single lesion only. A remarkable point is that the single wheal appears always in almost exactly the same place. In this there is a resemblance to the eruptions caused by certain drugs. The author describes three cases of this *Urtica solitaria*, as he terms it—two where the lesion occurred on the face and two where it occurred on the penis. In one of the two latter cases he had the opportunity of excising the lesion, and was consequently able to study the histology of the condition. He found the pathology of the eruption to consist principally in an enlargement of the lumen of the lymph-spaces and partly of the lumen of blood-vessels. The contour of the lymph-spaces was irregularly extended into the corium, separating the papillæ by diverticula lined with a single layer of squamous endothelial cells. He also observed spaces unlined with endothelial cells; these spaces were only defined by soft fibrous tissue, of which fine strands often stretched from side to side. The lumen of the blood-vessels contained their normal contents, but the lymph-spaces were empty except for a few cells. These alterations in the blood and lymph-vessels were the salient feature of the histology; otherwise the structure of the skin was normal, except that the amount of pigment was slightly diminished.

The author wishes to establish the occurrence of a single wheal—*Urtica solitaria*—as a special affection. He wishes to draw attention to its resemblance to drug eruptions and to *Herpes facialis* or *genitalis*. Although these affections differ ætiologically, morphologically and anatomically, he considers that the tendency to relapse always in the same situation shows that they are manifestations of a similar process.

H. D.

O TRATAMENTO DA LEPRO COM A NASTINA. MAX RUDOLPH.
(*Archivos Brasileiros de Medicina*, vol. ii, No. 3, p. 313.)

SINCE the year 1907, when Prof. Deycke introduced the treatment of leprosy by nastin, a number of cases have been placed on record. In this paper six cases of such treatment are included, with four diagrams. Of the six cases, which had a duration of from five to sixteen years, five greatly improved, and one was practically cured. It appears that nastin has in suitable cases the power of destroying the leprosy bacilli which are present in the organism, and so ameliorating the symptoms, or even curing the lesions of leprosy.

J. L. B.

DIAGNOSTICO ENTRE A BOUBA, LEISHMANIOSE, ESPOROTRICHOSE E BLASTOMYCOSE. TERRA and ARAUJO. (*Archivos Brasileiros de Medicina*, vol. ii, No. 3, p. 344.)

THIS is an interesting paper, and includes a striking coloured picture of leishmaniosis of the buccal mucosa. This disease may, of course, be confounded with blastomycosis, and in its vegetating forms with pian. But in pian, as opposed to the three other diseases under discussion, the Wassermann reaction is positive, and salvarsan gives favourable results, while it has no effect in the other three affections. Another resemblance of pian to syphilis is that in the former the glands enlarge and become shotty.

As regards the differences between sporotrichosis and blastomycosis as seen in Brazil, the benignity of the former, the exceptional localisation in the buccal and nasal cavities, and the efficacy of iodide of potassium (the successful employment of which in blastomycosis is doubtful), render the differential diagnosis fairly easy. In dubious cases animal inoculations must be resorted to.

J. L. B.

A SEROLOGICAL INVESTIGATION ON THE NATURE OF THE SPIROCHÆTA PALLIDA. DOHI AND HIDAKA. (*Archiv f. Derm. u. Syph.*, December, 1912.)

ACCORDING to the results of these researches the *Sp. pallida* are more nearly related to the protozoa than the bacteria.

H. C. S.

EXCRETION AND RETENTION OF SALVARSAN IN MEN AND ANIMALS. ULLMANN. (*Archiv f. Derm. u. Syph.*, December, 1912.)

IN an investigation which included the direct chemical examination of the urine and fæces, and the sweat of men and animals, and various organs of animals, to whom "606" had been given, both intra-venously and subcutaneously, this author comes to the following conclusions:

(1) Quantitative estimations of As. might be more accurate if there were a simpler and more accurate method available.

(2) Salvarsan, compared to other organic combinations of As. (and especially Hg. compounds), is exceedingly stable, and in consequence comparatively difficult of absorption, whether given intra-muscularly or intra-venously.

(3) Chemical investigations do not afford any evidence of a specific neuro-

tropism, or, in fact, a "tropism" of any of the organs in particular. Only, the liver, which, as the chemical factory of the body, always tries to protect it, and the kidneys, the organs of excretion, contain arsenic, both organic and inorganic, in measurable quantity.

A great deal of As. is excreted by the gastro-intestinal tract.

(4) The blood-plasma contains traces of As. after the intra-muscular injection for many months; after intra-venous, a great deal at first, but in the course of a few hours also, only traces. Hence the blood is only a passage medium in the history of salvarsan in the body.

H. C. S.

TWO CASES OF LEPROSY WITH TUBERCULAR TISSUE CHANGES. DEMONSTRATION OF LEPROBACILLI BY THE ANTIFORMIN METHOD. LOUIS E. MERIAN. (*Derm. Wochenschr.*, Bd. liv. 1912, p. 637.)

CASE 1.—A business man, aged 42 years, who had lived for more than twenty years in South America. Towards the end of 1896 he was troubled with sore throat and hoarseness, and as he had had lues in 1892, the condition was diagnosed as syphilitic, and it rapidly improved under injections. In 1900 he had malaria. In July, 1909, on his return to Hamburg with pneumonia, he noticed on the outer side of the left thigh above the knee a numb patch. Several doctors connected the condition with syphilis, and others with malaria, and he was treated alternately with iodides and quinine. Similar brown anæsthetic raised plaques appeared on the neck, back, and left arm. In January, 1910, the patient went to a specialist, who made a biopsy, and after a prolonged search by means of the Much granules method, a few isolated leprobacilli were found. In Prof. Unna's clinic there were found to be nine lesions, varying in size from a shilling to the palm of the hand. They were brownish in colour, raised above the surface, and with a sharp edge. The regions affected were the ears, left forearm, back and thigh. No thickening of the nerve-trunks was palpable. Other lesions appeared after six weeks' observation, but without subjective symptoms. The large area on the thigh was tender, and had decided anæsthesia, analgesia, and thermo-anæsthesia. The patient's statements as to the other areas were inconclusive. Thermo-anæsthesia was marked on the soles of both feet. Except for slight dilatation of the heart and thickening of the radial arteries, there was no evidence of visceral disease. Examination of the nasal discharge proved negative.

CASE 2.—A veterinary surgeon, aged 48 years, who had spent his youth in England, and had been in the Argentine for twenty-seven years. In July, 1911, he noticed behind the lobe of the left ear two dark brown tumours, the size of a hemp-seed. In a few weeks they had increased and coalesced to form a large, brownish-red patch raised above the surface. In the course of the next six or eight weeks three more spots appeared on the forehead, and about thirty were scattered about the body. The affection was diagnosed as leprosy in the Argentine. The lesions were on the face, behind the left ear, on the trunk, left wrist and third finger, right upper arm, right thigh, right foot, left thigh and leg. They varied in size from the palm of the hand to a shilling. The areas were reddish-brown, raised, rounded; and there were decided anæsthesia, analgesia, and thermo-anæsthesia, confined to the patches behind the ear, and on the

buttock. No thickening of nerve-trunks could be felt. There was no evidence of visceral disease, and no lepra bacilli were found in the nasal mucus.

Both men were strikingly strong-looking men of Tentonic race.

Histology.—Case 1: Section from lesion behind ear, stained by Unna-Pappenheim method. The horny layer showed no changes; the prickle layer was thickened in ridges, between which lay some enlarged papillæ. The infiltration was in the form of thickened strands cut transversely and longitudinally. They stood out from the otherwise normal cutis. The strands were entirely free from elastin, and consisted solely of cells containing slight traces of collagen. The blood-vessels at the edge of the affected area had thickened cellular walls: in the centre the infiltration was made up of homogeneously swollen cells and giant-cells, and at the periphery of typical and atypical plasma-cells. The swollen cells were not large and round as in tubercular affections, but lay in lines along the vessels. There were fewer giant-cells than in tubercular lesions.

Case 2: The prickle layer was thickened and flattened from pressure of the cutis. The papillæ could only be demonstrated here and there. The infiltration consisted of winding cords very close to each other, with small areas of normal collagen between them. At the periphery there were atrophic plasma-cells. The strands were formed almost entirely of giant-cells, between which a few homogeneously swollen cells persisted. The giant-cells were of every conceivable type—from that seen in tubercle to that met with in foreign body infiltration.

Bacteriology.—Dr. Merian first stained the sections by the ordinary Ziehl method, with a counter-stain of weak methylene-blue, but in spite of careful search in many sections he failed to find any bacilli. He also employed Unna's thymen Victoria blue, and Much's prolonged Gram process. He then used Uhlenhuth's method for demonstrating acid-fast bacilli in tissues treated by antiformin, and by this process lepra bacilli were found in about one third of the smear preparations. The bacilli were of the rod and cocco-thrix forms lying both singly and in groups. He then looked for the bacilli once more in the sections, employing the Ziehl method without counter-staining, and established the presence of *B. lepræ* in both cases lying in the neighbourhood of the giant-cells. On the suggestion of Prof. Unna the sections were stained overnight with thymen Victoria blue, rinsed in water, and counter-stained for half an hour with Unna's tannin-orange mixture, treated with absolute alcohol until no more colour came out, then cleared in cedar oil and mounted in balsam. By this method the bacilli of leprosy were stained a deep blue, and were easily found as they stood out against the orange-coloured tissue.—[Abstract by W. J. OLIVER, from translation by Miss JEANNETTE SHAW.]

THE COURSE THE VIRUS OF HERPES ZOSTER TAKES TO REACH THE NERVE-GANGLION. DOUGLAS W. MONTGOMERY.
(*Journ. of Cut. Dis.*, vol. xxxi, March, 1913, p. 156.)

THE anatomical basis of Herpes zoster is an inflammation of the ganglion on the posterior root of the affected nerve, or in the case of the fifth nerve, the Gasserian ganglion. In the large majority of cases it is now conceded that this ganglionitis is of bacterial origin. Any other traumatism giving rise to a severe enough ganglionitis may give rise to zoster, but bacterial trauma is the most frequent. How does this micro-organism that causes the neural ganglionitis and

the lymphatic adenitis which may be associated with it enter into the body, and along what highways does it reach such remote centres as the nerve ganglia lying besides the central nervous system? That is the question which the writer tries to answer in this paper, and the conclusion he comes to is that the bacteria travel along the lymphatics of the nerves. According to the writer, this theory accounts for so many of the clinical and pathological facts connected with the disease, that it seems to him reasonable to regard it as the true explanation. It accounted for the neuralgia which frequently preceded the eruption, the unilateral distribution of the disease, the much more frequent implication of the sensory than the motor nerves, and the enlargement of the lymphatic nodules coincident with the appearance of the eruption.

J. M. H. M.

THE SO-CALLED ANNULAR SYPHILIS OF THE NEGRO. H. H. HAZEN. (*Journ. of Cut. Dis.*, vol. xxxi, March, 1913, p. 148.)

UNDER the heading of annular syphilis are included two distinct classes of eruption: first, those lesions arising from the grouping of several papules, and secondly, and more properly, those arising from single papules. In this paper it is the second class of eruption which is referred to, the lesions of which belong to the secondary stage of syphilis. The writer found this eruption to be very prevalent in the negro, especially in the extremely young, and that females showed a slight predisposition towards it. The amount of negro blood had no influence on the frequency or character of this form of syphilide. The face, especially the corners of the mouth and eyes, is the most frequent site for the eruption, but it may occur anywhere upon the body. It is usually derived from the small, flat papule, but may come from any other form of papule. The histology differs slightly from that of the other papular syphilides, in that there is not the same massive perivascular infiltration; plasma-cells are present in abundance. The immediate prognosis is good. These lesions should not be confused with the "neuro-syphilides" which come on later in the course of the disease, and more nearly resemble Erythema multiforme.

J. M. H. M.

SEBORRHOEA OF THE LOWER LIP AND ITS RELATIONSHIP TO EPITHELIOMA. DOUGLASS L. MONTGOMERY. (*Journ. of Cut. Dis.*, vol. xxxi, February, 1913, p. 82.)

THIS paper is based on the observations of two cases in two men. One of them had a large epithelioma over the right malar region that had developed from a seborrhœic patch similar to others present on the face. He also had seborrhœic patches and a horny mass along the exposed mucous membrane of the lower lip. The other man had had an epithelioma excised from the lower lip some years before. The scar from this operation was sound and smooth, but alongside it there was seborrhœic crusting, and there was seborrhœa of the face and an epithelioma on the right side of the nose.

These seborrhœic conditions of the lip in their early stages almost always yield to treatment either with trichloracetic acid or with the X-rays. These must be

thoroughly treated to prevent the occurrence of cancer. Should cancer supervene it should be dealt with by operation, and the seborrhœic crusts which may persist attended to to prevent a recurrence of epithelioma.

J. M. H. M.

REVIEW.

DIE VASOMOTORISCH-TROPHISCHEN NEUROSEN.*

THE second edition of Cassirer's admirable monograph, which has appeared after an interval of twelve years, has been considerably enlarged and mostly re-written.

The opening chapter on the anatomy and physiology of the vasomotor, trophic and secretory centres and fibres of the nervous system summarises our present-day knowledge of the sympathetic, cranial and sacral outflows of visceral nerves.

The succeeding chapters deal in detail with the history, ætiology, symptomatology, pathological anatomy, pathology, diagnosis, course and treatment of acroparæsthesia and related states, erythromelalgia, Raynaud's disease, acroasphyxia chronica, sclerodermia, acute circumscribed œdema, and multiple neurotic gangrene of the skin. In each of these conditions new cases personally observed by the author are described at length, and a complete review of the relations of each condition to the others and to other disease processes giving rise to somewhat similar phenomena is given. Each chapter is in itself a complete monograph.

The book is completed by a very full bibliography extending over 92 pages, and should prove of extreme value to all who are interested in this group of little-understood diseases. There is no index.

E. G. F.

LITERARY NOTE.

WE have received from Mr. H. K. Lewis a new *Pocket Case Book* designed for the use of students and practitioners.

The book is neatly bound in limp cloth and the page measures 8 in. × 5 in. It is arranged for twenty-five cases; four pages are allotted to each case, and the headings are arranged for the record of the usual particulars, including personal history, family history and present condition.

There are also diagrams for the marking of physical signs, space for diagnosis, prognosis, and extra space for the record of treatment and progress, including a miniature temperature chart, which should be very useful.

The price is 1s. 6d. net.

* *Die Vasomotorisch-trophischen Neurosen.* By VON DR. R. CASSIRER, Privatdozent an der Universität, Berlin. Zweite Auflage. Mit 24 Abbildungen in Text und 24 Tafeln. S. 988. Berlin: Karger, 1912. Price M. 30.

THE BRITISH JOURNAL OF DERMATOLOGY. AUGUST, 1913.

A METHOD OF STANDARDISING THE TINTS GIVEN BY THE SABOURAUD-NOIRÉ PASTILLE.

By DUDLEY CORBETT, M.D.,

*Assistant in the Skin and X-ray Therapeutical Departments, St. Thomas's
Hospital.*

If one examines a number of specimens of tint B as affixed to the Sabouraud-Noiré card, especially those obtainable seven or eight years ago, it is evident that these standards vary considerably in tint. The directions state, as is well known, that when a pastille in the proper position reaches tint B, the skin has received a maximal dose; beyond this, erythema, dermatitis and permanent alopecia will ensue. A reliable standard is, therefore, necessary if one employs the full Sabouraud dose for epilation.

Moreover, it is a fact that apart from those instances where dermatitis has occurred as a result of a faulty position of the anticathode,* there have been cases of dermatitis owing to the use of a false standard for tint B. In one instance the standard was returned to Sabouraud, who pronounced it $\frac{1}{2}$ too dark.

As far as one can ascertain, the composition of the original emulsion as invented by Sabouraud and Noiré has remained unaltered. It is known that a hard type of radiation causes a more rapid change than that of softer quality, but when using a medium tube the standard should be invariable.

To obtain this standard I have examined the composition of the colour changes as they occur in the pastille itself by means of a Lovibond's tintometer.

* *Proc. Roy. Soc. Med., Dermatological Section, March, 1913.*

In this apparatus there are three series of slips of glass dyed with proportionate and finely graded shades of the three primary colours which can be fixed in a viewing tube. This tube is divided by a central vertical division and so arranged as to look directly upon a white evenly illuminated background. The eyepiece is monocular, so that on looking down the tube one sees two evenly illuminated white squares. The pastille or tint to be matched is fixed on the background so as to occupy one square. By means of slits in the tube the glass slips are inserted so that the other square can be made to match the tint exactly by a combination of colours. The values of the tints used are then read off. The fact that the eye has to appreciate one square by reflected and the other by transmitted light does not create much difficulty. The instrument requires some practice in its use. At first one has some difficulty in appreciating the addition of 0.5 red to a pure yellow, but with experience one can detect as little as 0.1 to 0.2 alteration.

The X-ray tubes used for these experiments were well seasoned, and varied very little from day to day in the number of interruptions required to produce the B tint so long as the milliampère and qualimeter readings remained nearly constant. A dipper break with tachymeter was employed, and the number of interruptions used for several epilation cases with a given tube was noted. Large pastilles 1 in. by $\frac{5}{8}$ in. were used in a special holder to facilitate the examination. These were placed in the usual pastille position, and the requisite number of interruptions given. They were then rapidly examined by the tintometer under diffused daylight.

It is possible that the pastille lost some of its colour by repeated examinations, but by control experiments this was found to be a negligible factor.

There was also noticed with these large pastilles a slight but appreciable shading off of the tint towards the periphery of the radiation circle when tint B was reached. This shading was too slight to be measured with $\frac{1}{4}$ dose, but was quite appreciable with larger doses.

The Sabouraud standard as used in my department is a mixture of yellow 15.0, red 1.5. This is a full tint B and the limit that can be employed without dermatitis. At one time I was in the habit of reaching this tint for all epilation cases. Slight erythema has occasionally followed with this dose, but there has been no impairment of

the re-growth of the hair. Now I use $\frac{1}{3}$ to $\frac{2}{3}$ of this in tinea cases for every patch except that on the top of the head (Kienböck-Adamson method) which usually requires the full dose for satisfactory epilation. Mr. Blackall, of the London Hospital X-ray Therapeutic Department, whose experience in judging the Sabouraud tints is probably unequalled in this country, has been kind enough to examine my standards. He agrees that my tint B represents the limit of safety, and tells me that he seldom reaches this except for the top patch.

A large number of experiments were made, of which the following are typical.

The results obtained show :

- (1) The unexposed pastille is a mixture of yellow and blue.
- (2) The blue gradually disappears, until at a point just below the $\frac{1}{3}$ -pastille dose there is no other colour present but yellow.
- (3) Red then appears in increasing proportion, causing the tint to become deeper in tone.
- (4) The proportion of yellow remains constant throughout.
- (5) The experimental error for red is about 0.15.

Experiment 1.—Reading by Bauer 4-5. Milli-amps. 0.6. 10,000 interruptions taken as full epilation dose in practice.

Interruptions.	Yellow.	Red.	Blue.
5000	15.0	—	—
10000	„	1.25	—
11000	„	1.45	—
12000	„	1.65	—
13000	„	1.85	—
14000	„	2.0	—

Here it is seen that 11,000 is the full number required to match the standard, and that just below $\frac{1}{2}$ dose there is yellow only present. Beyond this point the red increases by about 0.2 per 1000 interruptions.

Experiment 2.—Reading by Bauer 6. Milli-amps. 0.8-1.0. 7000 interruptions needed for full epilation dose in practice.

Interruptions.	Yellow.	Red.	Blue.
Unexposed	15.0	—	3.0
1000	„	—	2.0
2000	„	—	0.7
3000	„	trace	—

Interruptions.	Yellow.	Red.	Blue.
4000 .	15·0 .	0·6 .	—
5000 .	„ .	0·9 .	—
6000 .	„ .	1·25 .	—
7000 .	„ .	1·45 .	—
8000 .	„ .	1·75 .	—

This experiment was continued up to 14,000 interruptions, and it was found that the red increased by about 0·3 per 1000. It is to be noted that there was a trace of red at the point rather under $\frac{1}{2}$ dose.

Experiment 3.—Reading by Bauer 6-7. Milli-amps. 0·6. 9000 interruptions required for full B in practice.

Interruptions.	Yellow.	Red.	Blue.
Unexposed .	15·0 .	— .	3·0
1000 .	„ .	— .	2·0
2000 .	„ .	— .	1·25
3000 .	„ .	— .	0·7
4000 .	„ .	— .	0·25
5000 .	„ .	0·6 .	—
6000 .	„ .	0·85 .	—
7000 .	„ .	1·1 .	—
8000 .	„ .	1·35 .	—
9000 .	„ .	1·65 .	—

Here, as in experiment 2, there is a rather sudden development of red. The $\frac{1}{2}$ -pastille dose would probably have had a tinge of red in it.

In these experiments a pastille previously unexposed was used in each case. They were afterwards repeated, using a pastille which had been exposed and subsequently bleached. The blue content started at 2·3 instead of 3·0, otherwise the results obtained were almost identical.

The average values from a number of experiments are as follows :

$\frac{1}{3}$ B. . . .	Yellow 15·0 .	Blue 0·5
$\frac{1}{2}$ B. . . .	„ „ .	Red 0·25
$\frac{2}{3}$ B. . . .	„ „ .	„ 0·7
$\frac{4}{5}$ B. . . .	„ „ .	„ 1·0
$\frac{1}{1}$ B. . . .	„ „ .	„ 1·45

It is interesting to compare the values obtained from various

the joint well bandaged. Since then he had only felt the knee to be rather painful occasionally after walking any long distance. On the morning previous to his appearance at the hospital, *i. e.* on June 11th, while brushing the shoe which he was wearing, with the knee flexed and the foot resting on a chair, the patient had put the left knee out again for the second time. He was able to put it back quite easily, but the joint was very painful for the whole of that day, and still caused some pain when seen in the skin-department on the following morning. About six hours after the accident the left leg and ankle had become swollen and the patient then noticed for the first time the red spots on his leg. There was no pain in the leg below the knee at that or any subsequent time. Beyond bandaging the knee he had not applied anything to this part of the leg after the accident. He had never noticed any similar skin-trouble before. His previous health had always been good and he gave no definite history of rheumatism or any other joint pains. He had suffered from tonsillitis about Easter time of this year when he was off work for a fortnight, and was taking during that time some medicine prescribed by his panel doctor. I could obtain no family history suggesting hæmophilia.

When seen on June 12th the skin lesions were confined entirely to the left leg below the knee. Commencing $3\frac{1}{2}$ in. below the internal tuberosity, on all aspects of the limb, though more on the inner than on the outer surface, was a diffuse macular eruption of dark red purpuric lesions varying in size from a pin's head to a small split-pea. The larger lesions tended to be arranged in groups, and on the inner side of the shin had a somewhat mottled appearance suggesting rings or the meshes of a net. The smaller lesions were discrete; several of these were apparently hæmorrhages into the hair-follicles, where they could be felt as pin-head-sized papules. Around the internal malleolus was a dusky ring, leaving the bony prominence clear, while over the external malleolus the lesions extended in a short linear distribution. The left knee-joint appeared rather swollen, there was no œdema of the leg below the knee, nor any swelling about the ankle. The patient was of medium height but did not appear anæmic. The heart apex-beat was in the fifth left interspace in the nipple line and there were no abnormal physical signs in the chest or abdomen. An examination of the blood revealed nothing remarkable: the radial arteries were soft, and the maximum

blood-pressure, as measured by the Riva-Rocci apparatus, was 98. The urine was straw-coloured, slightly alkaline, and contained no albumen and no sugar.

From the extremely localised and unilateral distribution of the purpuric lesions, the absence of any unusual physical signs and the history of sudden injury to the knee followed by no tight bandaging of the affected joint, the purpura can only be described as being traumatic in origin.

When seen again on July 5th the leg was quite clear of any purpuric spots or staining, and the patient had felt perfectly well since the accident reported while he continued to keep the left knee well bandaged. He had not been at work during the four days immediately following the accident. No fresh lesions had appeared since the day of his first attendance at the hospital.

I am indebted to Dr. J. H. Sequeira for his suggestion and permission to publish the notes of this case.

ROYAL SOCIETY OF MEDICINE.

DERMATOLOGICAL SECTION.

MEETING held Thursday, July 17th, 1913, Sir MALCOLM MORRIS, K.C.V.O., President of the Section, in the Chair.

Dr. ADAMSON showed a case of *acute Lupus erythematosus with Lupus vulgaris* (or ? *Lupus pernio*). The patient was a gentleman, aged 50 years, who had spent twenty years in India. While in India he had had ague. He had also had leucoderma, of which there was now no trace. A few months ago a little sugar was found in the urine and this had disappeared on dieting. He was otherwise apparently in robust health. The eruption on the face and scalp consisted of four red, raised, sharply circumscribed patches, one on the right temple (2 in. by 1½ in.) and involving the right upper eyelid, one on the forehead above the inner end of the left eyebrow, one on the right cheek and another on the right side of the scalp, each of these about the size of a shilling. The patch on the scalp and that on the cheek had the characteristic stippled appearance of *Lupus erythematosus*, but the two on the forehead did not show this. The patches had appeared

almost suddenly three months ago and had gradually increased in size. On the right side of the abdomen there were two large oval patches, red-brown in colour and showing the typical "apple-jelly" nodules of *Lupus vulgaris*. One patch had been present two years or longer and was scarred in the centre; the other had appeared within the last six months. He showed these cases on account of the interest of the association of acute *Lupus erythematosus* with *Lupus vulgaris*, but he was prepared to question his earlier diagnosis, and to ask was this a case of *Lupus pernio* and not an association of what he believed to be two distinct affections—*Lupus erythematosus* and *Lupus vulgaris*?

Additional note.—Since this case was exhibited the plaque on the forehead above the left eyebrow has begun to show, buried in the more uniform dusky red area, separate red-brown nodules suggestive of lupus nodules, and this appearance has still further inclined the exhibitor towards the diagnosis of *Lupus pernio*. The case has given a positive von Pirquet reaction.

Dr. PRINGLE accepted Dr. Adamson's view that the patches on the abdomen were tubercular lupus, but regretted that he could not accept Dr. Adamson's diagnosis of the lesions on face as being true erythematous lupus. They might perhaps be early mycotic tumours as some Fellows suggested; but he was more inclined to regard them as examples of what had been described by Radcliffe-Crocker as the *nodular* type of erythematous lupus, which was in reality a distinctly tubercular disease. In two cases of this rather rare condition observed by himself and accepted as such by Radcliffe-Crocker, and in one recorded by Dr. Liddell, the tubercular nature of the disease had been established microscopically. A peculiar and confusing point about the condition was that it affected the same distribution as typical erythematous lupus, as did the *Lupus vulgaris erythematoïdes* of Leloir. Dr. Pringle suggested the desirability of a biopsy or of a test tuberculin injection.

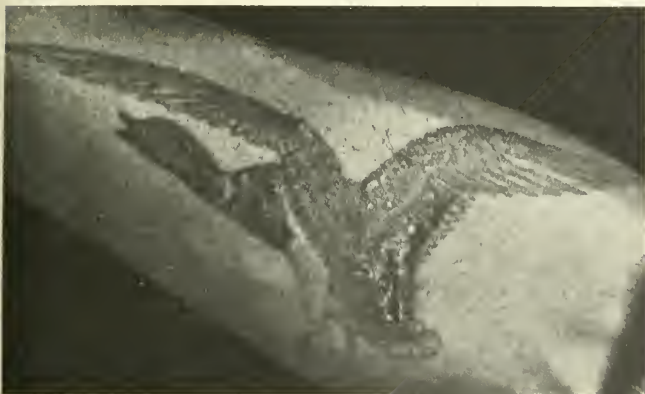
Mr. T. P. BEDDOES showed a *case for diagnosis*. The patient was a middle-aged Italian, who had been in this country two years. Seven months ago the condition now seen appeared on one left toe; a month afterwards it appeared on the hand, and at the same time there had been lesions on the penis and one week ago in the throat. A Wassermann reaction had not been done, and he had had no specific treatment.

The toe was swollen, suggesting cellulitis, negated by the limited area and the tint. There was a little enlargement of the inguinal glands on both sides.

On the glans penis there was localised erythema, not indurated or raised. On the back of the hand an area with one inch diameter was red with an irregular edge; no scaling.

On the right side of the soft palate were irregular bright red, not raised, isolated spots.

Dr. S. E. DORE showed a case of ? *tuberculous infection of tattoo-marks*. The patient, a man, aged 29 years, was seen in consultation with Mr. Percy Sargent. Five years ago he had been tattooed on



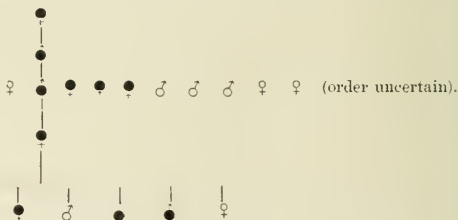
both forearms. Three years later he went to the same operator to have the work touched up. About two months ago a small swelling appeared on the right tattoo mark which had gradually increased in size. It was now a flat raised patch with a well-defined edge and soft to the touch, measuring 1 in. in length and $\frac{1}{2}$ in. in breadth. There were also about a dozen small conical elevations, smaller than a pea in size and some having a slight central depression not unlike tuberculosis, which had appeared soon after the larger lesion, in the part which had been touched up, and three or four similar papular lesions of more recent occurrence in the mark on the left forearm. Owing chiefly to the history, a tentative diagnosis of keloid had been made at first and X-ray treatment suggested with free excision as an alternative.

Dr. MACCORMAC showed *five cases of Epidermolysis bullosa*. The patients exhibited, a mother and four children, were sent to the Middlesex Hospital by the school medical officer. The mother was quite familiar with the course of the disease, as she could trace it through five generations (see Table).

In all cases the affection commenced in infancy, tending to become less marked in adult life. Both sexes were involved; the family history is good, although the mother has a cured Lupus vulgaris.

The complaint becomes most troublesome during the summer

months, large blisters appearing where any pressure has been applied, the feet being especially involved, a condition resembling a severe dysidrosis resulting. A tight collar or garter will cause a bulla to



Pedigree of cases of Epidermolysis bullosa (Dr. MacCormac).

appear in from twelve to twenty-four hours, preceded by some tingling and pain. Nikolsky's sign is not present. The bullae leave no scars. No epidermic cysts are present, and the nails have not been involved. A blood examination in two cases showed a perfectly normal condition. There was no eosinophilia.

SIR MALCOLM MORRIS and DR. DORE showed a case of *pigmented tropical skin with multiple epitheliomata of the rodent type also with barcoo rot* in a male patient, aged 53 years.

Family history.—Father and mother were healthy. Four brothers and two sisters are alive and enjoy good health. There is no history of any skin-disease in the family.

Personal history.—The patient has always been healthy with the exception of a severe attack of influenza. His mother noticed that he had a particularly white thin skin.

History of present condition.—The patient went to West Australia thirty years ago. Soon after his arrival he became intensely sun-burnt, and frequently had blisters on his neck and was obliged to wear a chamois leather cap over his nose. His face was protected by a large broad-brimmed hat. He often went out in a singlet only in order to acclimatise himself to the sun. About eight years ago small warty growths began to appear on his face and arms. These began like inflamed warts and ended in ulcers. Some of them disappeared as the result of the application of silver nitrate, but in some cases this treatment seemed only to irritate the growth. Six of these tumours were excised from the neck and face, one large tumour on the side of the neck being grafted. After microscopical examination the tumours were said to be rodent ulcers. The patient attributed several small scars on his arms to Barcoo rot, a condition well known in Australia, and apparently due to abrasions of the skin followed by septic infection. These never ulcerated, and he considers them quite distinct from the ulcers on the face and neck. X-rays were tried in Perth without any good result.

Present condition.—The skin of the neck, shoulders and upper part of the chest and back was deeply pigmented, the pigmentation chiefly consisting of small closely aggregated macules, some of which were darker than others. Around the neck the skin was not only mottled from a fine pigmentation but rugose and somewhat thickened.

There were several congenital pigmented moles on the abdomen and back. The forearms were also deeply pigmented, especially on the extensor surfaces, and covered with long hair, the pigmentation ending abruptly just below the elbows and at the distal ends of the metacarpal bones. On the face there were several large, smooth scars where the tumours had been excised, and on the forearms numerous thickened, warty patches, also leaving scars.

The PRESIDENT showed a case of *pigmented tropical skin, with multiple epitheliomata*.

A section was exhibited under the microscope by Dr. MacCormac. The disease was something like the veldt sore of South Africa, and he had seen a somewhat similar condition in the skin of labourers in this country. Dr. Ernest Black had written an account of the condition, and it was mentioned in the book by Castellani and Chalmers, the statement made being that it was a streptococcic infection, though of what form was not clear.

Dr. ADAMSON regarded the case as an example of the disease met with on the face and hands in elderly persons whose occupation exposed them to sun and light—the affection known as “Keratoses senilis,” or by the name given to it by Unna, viz. “sailor’s skin.” He did not agree that the warty ulcerating growths were true rodent ulcers. They differed in appearance; in the fact that, unlike rodent ulcer, they arose upon a previously damaged skin; in that their distribution depended upon the distribution of the original damage—they were present, for instance, upon the hands; and above all, in that they were liable to become carcinomatous and infect the glands, etc. Microscopically, they were sometimes squamous-cell epitheliomata; sometimes, as in the present case, basal-cell epithelioma. Usually these basal-cell epithelioma showed also some prickle-cells, cell-nests, and a tendency to invade, break through the palisade-layer and invade the lymphatic spaces. In the sections under the microscope these features were but little marked and he admitted the close resemblance to rodent ulcer, but would prefer to describe it as a basal-cell epithelioma.

Dr. MACLEOD said that it was possible that the chronic dermatitis due to the actinic rays of sunlight might predispose to “Barcoo rot,” but the condition was extremely like veldt sore and was doubtless a microbic infection. From the latter condition Bishop Harman had isolated a diplococcus, which he did not believe to be an attenuated form of *Staphylococcus aureus*.

Dr. WILFRED FOX said he did not think acquired Kaposi’s disease was very uncommon; he had seen two cases in one family, who had lived in Honolulu. Both acquired it in adult life. They were ladies, aged 35 and 38 years respectively.

Dr. BOLAM said he had seen an analogous condition in three or four paraffin workers; they got a similar pigmentation, with epithelial growths of the same

microscopical characters as in this case, and there were also sores which healed readily under suitable treatment.

The PRESIDENT: Further report on case shown last time.

A case he showed last time was thought by several members to be *Mycosis fungoides*, and further investigation had shown that they were right, for Dr. Whitfield had examined the growth microscopically and found it was not sarcoma. He now showed the case to indicate the benefit which had been derived from X-ray treatment, for the mycotic changes had practically disappeared.

Dr. G. PERNET showed a case of *acute Lichen planus, treated by lumbar puncture*. The patient was a woman, aged 52 years, who attended at the West London Hospital on June 24th, with an acute Lichen planus which had been present three weeks. It was spreading very quickly and the pruritus and irritation were extreme. He had brought the case to show the result of treatment. She was admitted, and he asked the house-physician, Mr. Hammond, to do lumbar puncture. At 11 o'clock next morning this was done, $7\frac{1}{2}$ c.c. of cerebro-spinal fluid being withdrawn. From that time the pruritus began to yield, and by 4 o'clock the same day it had practically ceased. No other treatment. No pruritus since, and the condition was now involuting. She was given mist. sacchari nsti. The cerebro-spinal fluid did not show lymphocytosis, but, as is usual, it reduced Fehling. Two years ago he had had a similar acute case in private in a male patient, but there were difficulties about the patient entering a nursing home to have it done. But the result of lumbar puncture was good. In this case the cerebro-spinal fluid did not reduce Fehling. In a case in which the puncture was done and the patient allowed to go home very severe headache ensued and lasted five or six days; and he concluded it was far better to have the patient under observation. The sooner the puncture was done for acute Lichen planus the better the result *quâ* pruritus. Ravaut, of Paris, had worked at this subject for three years, and his published writings should be consulted for further details.

Dr. G. PERNET showed a case of *Acne varioliformis*. The patient, a man, aged 70 years, was now almost well as a result of treatment. He had first attended the West London Hospital for an eruption occupying the upper part of the trunk, in front extending below the transverse

nipple line. The outbreak was acute and the characteristic lesions closely aggregated. On the scalp the lesions were older. No local application was ordered, but simply mist. ferri perchlor. *ter in die*, and a week after the eruption had cleared up.

Dr. J. J. PRINGLE brought forward a well-marked example of *Mycosis fungoides* in a male patient, aged 41 years, by occupation a warehouseman, and of pure English stock, who had come under observation in the Middlesex Hospital Skin Wards on June 24th.

History.—One brother had died of tuberculosis, but there was nothing either in his family or personal history to throw any light upon the ætiology of the case. The eruption apparently showed itself about four and a half years ago in the form of insignificant rough and slightly irritable patches on the thighs and forearms. No importance was attached to these by a medical man who examined him for life insurance. Soon afterwards a red rash appeared in the same localities; this itched considerably and a red swollen patch appeared on the dorsum of the left foot, which “broke and discharged.” Three and a half years ago red and hard lumps came out on the penis, which soon broke down leaving deep ulcers. He was treated for syphilis for a year with mercurial pills. During this time his skin was being gradually invaded, becoming “thickened, lumpy and breaking down” over wide areas. For two years previously and up to his admission to the Middlesex Hospital he had been attending as an out-patient at a skin-hospital; he states that his disease was there called *Lichen hypertrophicus* and the only treatment adopted was by arsenic internally, not apparently in large or in increasing doses. His general health had only been impaired in the last six months; he had, indeed, been able to follow his work, and said he “only felt ‘rather weak’”!

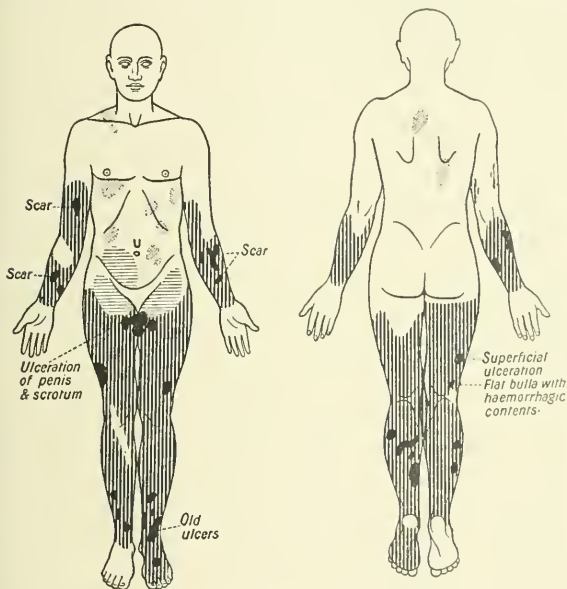
Present condition.—As the general characters of the eruption were typical and familiar to all Fellows of the Section no minute verbal description was necessary or desirable. The accompanying schemata roughly indicated the distribution of the disease in all its stages.





(1) Various sized patches of well-defined erythrodermia and scaling, roughly circular in outline.

(2) Huge areas of soft doughy infiltration with very coarse lichenification.

(3) Large masses of tumours arising from infiltrated skin.

(4) Very numerous large ulcers resulting from the necrosis of growths and of the rupture of *large hæmorrhagic bullæ* which were



-  (1) Premycotic erythrodermia.
-  (2) Various stages of infiltration and lichenification.
-  (3) Tumour formation.
-  (4) Ulcers and scars.

very abundant and constituted one of the most prominent, and the only unusual clinical feature of the case. Numerous deep white scars are also indicated in black.

The spleen was palpably enlarged as also the inguinal glands, but there were no other lymphatic enlargements. Repeated blood

examinations showed no tangible deviation from the normal; there was no anæmia, no leucocytosis and no eosinophilia. Blood-cultures were sterile. Examination of the urine revealed no abnormality. The Wassermann reaction was negative.

Dr. Henry MacCormac epitomised the microscopical appearances of excised portions of skin as follows :

“ I. *Premycotic Lesion.*

“(1) *Low power.*—The epithelium is seen to be intact; in many places it exhibits a considerable œdema, while here and there collections of cells have strayed into the Malpighian layer. The round-cell infiltration is confined very sharply to the papillary and sub-papillary layer.

“(2) *High power.*—A dilatation of the vessels and lymphatics of the papillary and sub-papillary layers is to be seen. The cells forming the infiltration are of no very definite type, but rather characterised by multiformity. No giant-cells are to be found.

“ II. *Advanced Lesion.*

“(1) *Low power.*—The striking appearance is the dense infiltration of the skin with ‘round cells.’ No very marked alteration of the epidermis except an almost complete disappearance of the papillæ can be detected.

“Scattered throughout the deeper parts of the infiltration are numbers of giant-cells.

“(2) *High power.*—The epidermis is seen to be reduced to a thin rind, with an almost complete absence of papillæ. Well-marked prickles can be observed in the Malpighian layer.

“The infiltration presents cells of a very multiform aspect. Besides those of a round form there are many with an angular, oval, or irregular outline. The giant-cells are of rather irregular outline and formation, and in many cases have become fused together. There is a proliferation of the endothelium of the smaller blood-vessels. Some of the larger arterioles show distinctly thickened walls.”

Dr. Henry Beckton reported that Altmann’s granules were present in great abundance in all cells composing the growth. This fact, according to Dr. Beckton’s researches, demonstrated the non-malignant nature of the tumours.

The principal method of treatment employed had been prolonged immersion in warm starch-boric-cyllin baths, under which a large number of the ulcers had healed with surprising rapidity and kindness. In the intervals the ulcers were treated with diluted boric ointment. Pastille doses of X-rays were being applied to the prominent tumours, which had certainly become softer, less prominent and less well-defined since admission. The patient had also received a full intravenous injection of salvarsan without appreciable effect, either local or general.

Dr. SEMON showed a case of *Urticaria pigmentosa*. The patient was a child aged 2 years, and eighteen months ago spots first appeared on the back, and later spread round to the front, and were now present on the neck. When scratched they showed factitious urticaria. A similar case was shown by Dr. Meachen in March last. There was nothing in the history to throw any light on the ætiology, and the child was in all other respects well nourished and healthy. The case belonged to the macular type, and there were no nodules noted at any time. On diascopy of the round, brownish, slightly infiltrated macules slight staining was manifest. The lesions were not irritable.

Dr. KNOWSLEY SIBLEY showed (1) a case for diagnosis—*parapsoriasis*. A fairly healthy looking girl, aged 17 years, who for at least ten years has suffered from a more or less persistent eruption over many parts of the body. There is nothing of interest in the family history.

She had a slight presystolic cardiac bruit and some displacement of the apex-beat, and shows evidence of a chilblain circulation, with rather cold and slightly cyanosed fingers and hands. She suffers from pernio on the dorsum of the fingers in cold weather.

The eruption first appeared in the legs and knees, and now is most abundant on the forearms, dorsum of hands, on the thighs and legs, present over the olecranon processes and patellæ and slightly on the face, especially in the left eyebrow. A few scattered lesions are present on the neck, and abundant circumscribed, sharply defined patches are present on the sides over the lower ribs and costal cartilages, both anteriorly and posteriorly.

They have only appeared on the trunk this year; formerly they

were confined to the limbs. At one time the lesions appeared in a line on the dorsum of the hand after a pin scratch.

The eruption consists of scattered, variously sized, scarcely elevated plaques, which are mostly well defined and of a rose-red colour, except those on the forearms and hands, which often have a blue or violaceous tint, the surface in some places slightly scaly; in others desquamation is absent, and the surface has somewhat a marked and reticulated appearance. The palms are free from eruption, but it is slightly present in the soles.

The finger-nails are markedly glistening and pitted in several places. The teeth are well preserved, and the mucous membranes normal. Symptoms are completely absent; the evolution has been very slow and the eruption has been most rebellious to treatment. Some eight months ago I had her in the hospital, and considerable improvement was obtained by Dowsing's radiant heat baths and chrysarobin ointment (4 per cent.), but she soon relapsed after leaving the hospital.

The patient says the eruption is generally most abundant in the spring, and does not differ much in summer or winter.

Histological report of a section of a lesion taken from the dorsum of the right hand in June, 1912:

(1) Stratum corneum shows thickening, with a fine granular appearance in the hair-follicles; no horny cells can be seen.

(2) Hair-follicles are dilated and filled with horny material.

(3) Stratum granulosum is thickened.

(4) Stratum mucosum shows a slight thickening in places, and there appears to be an œdematous condition of the prickle-cells.

(5) The papillary spaces appear to be dilated and also their blood-vessels.

(6) Blood-vessels in the dermis show slight dilatation, and are surrounded with round and spindle-shaped cells, and there appears to be some œdema of the connective tissue.

Parapsoriasis, *Lichen variegatus* (Crocker), psoriasiform and lichenoid exanthem, *Dermatoses psoriasiformes* (Jadassohn), resistant maculo-papular scaly erythrodermias (Colcott Fox and Macleod). *Erythrodermie pityriasique en plaques disseminees* (Brocq).

Brocq divides cases into three groups:

(1) Parapsoriasis guttata—like psoriasis.

(2) Parapsoriasis lichenoides—intermediate between psoriasis and lichen.

(3) Parapsoriasis in patches—like seborrhœic psoriasis.

The present case reveals features of all three groups: (1) the marked distribution of the lesion over the elbows and knees, and a few weeks ago of a typical guttate psoriasis over the abdomen and back; (2) many lesions, especially those on the forearm and hands, are intermediate between psoriasis and lichen; and (3) the lesion on the left eyebrow is one of seborrhœic psoriasis.

I suggest that this case shows (and she has some seborrhœa capitis in addition) a fourth variety, nearly one of an erythema, especially marked in the lesions on the dorsum of some of the fingers, which at times resembles those of *Lupus erythematosus*, and which have left some superficial scarring, and are the seat of lesions of a chilblain nature during the cold weather.

Dr. ADAMSON considered the case one of *Lichen planus* of the annular type. There were everywhere typical flat-topped angular papules, and here and there atrophic patches and pigment stains from faded lesions.

(2) A case of *multiple Lupus vulgaris*, treated with CO₂ snow and zinc ionisation. The patient was a boy, aged 9 years, who had had thirteen patches of lupus which came on after an attack of measles, occurring in March, 1909. The first lesions appeared on the cheeks, then on the trunk, buttock, back of thighs, front of the right leg, the dorsum of the left wrist and elbow.

On June 15th, 1911, under a general anæsthetic, a circular stick of solid CO₂, measuring two inches in diameter, was applied for 2½ minutes with firm pressure to a lesion of this size on the posterior of the right thigh and two smaller ones to the lesion on the left cheek for two minutes. On subsequent occasions for similar or lesser time solid CO₂ was applied to some of the other smaller lesions. The scar left on the thigh is seen to be a fine and regular one, measuring some 1¼ inches in diameter, and with the possible exception of a minute granuloma left at one spot in the margin the disease was cured by this one application, and this lesion has not been treated since.

Three or four other quite pale, almost invisible scars are seen over the lumbar region, where also one application of the CO₂ has eradicated the disease.

Similar scars are present on the thorax and abdomen, and one over the dorsum of the left wrist, which was treated in two areas of one minute each.

The lesion on the anterior of the right leg has been treated by zinc ionisation, and shows a very satisfactory pale scar in the central regions, with a few semi-quiescent granuloma at the periphery, and which are now being treated by application of a mixture of acetone and CO_2 .

Dr. DORE asked how many cases Dr. Sibley had treated in this way. He had himself been disappointed with the use of the snow in *Lupus vulgaris*. He had seen cases in which severe applications had caused necrosis of the tissues and destruction of some of the lupus tissue, but such heroic treatment seemed uncalled for, and it seemed much better to excise the patches. He would like to hear whether in all the cases of the condition so treated by Dr. Sibley, similar smooth scars had resulted.

Dr. KING SMITH showed a case of *Dermatitis herpetiformis*.

History.—Mr. J. B—, aged 34 years, born in England; duration seven years. Seven years ago patient felt a tenderness of the mouth, especially so on the taking of hot drinks and food. In a short time blisters appeared in mouth, leaving a raw condition. About four months after large blisters appeared on various parts of body, some being of the size of an orange. During the outbreak of bullæ patient lost many pounds in weight and was quite prostrated.

The attack gradually subsided and he regained his lost weight and felt in fairly good condition, but soon an attack similar to first one appeared.

Three years ago he came under my observation. He was then bed-ridden, and had been so for several weeks.

On examination, mouth showed a macerated appearance of epithelium, many denuded areas and exfoliations. There was great salivation, so much so that patient lay with his head hanging over edge of bed so that saliva could run freely away. There was marked pyorrhœa.

The body presented in axillæ, umbilicus and groins vegetating lesions, giving the appearance as if they had spread from a centre outwards, leaving in their track a marked pigmentation. Scattered here and there were many pustules, which seemed to be the beginning of the vegetations.

Urinalysis negative.

Blood examination: slight increase in eosinophiles, not marked. Otherwise examination was normal.

Pus from pustule showed ordinary *Staphylococci albus*.

Scrapings from vegetations did not reveal any fungi.

Wassermann was negative, and from inquiry patient had been given anti-luetic treatment without any benefit.

By continuous irrigation of mouth with weak permanganate solution and removal of teeth the buccal condition improved markedly. Patient was soon able to take nourishment and gained rapidly in weight.

The vegetations never entirely disappeared, although much less at certain periods.

During past three years he had quite a number of attacks, but none quite as severe as when I first saw him.

The diagnosis of *Pemphigus vegetans* was made.

Vaccine therapy was tried. No improvement noticed.

Dr. SEQUEIRA said he had had a similar case in a woman, who had been sent to him at the London Hospital by Dr. Cursham Corner. He thought it was generally recognised that there was a variety of *Dermatitis herpetiformis* with vegetative lesions. The prognosis in such cases was not so serious as in *Pemphigus vegetans* proper.

Dr. PRINGLE remarked that the interrupted course of the case exhibited with marked periods of comparatively good health scarcely accorded with the accepted or classical notions as to *Pemphigus vegetans*, which was generally a rapidly progressive and fatal disease. That, at least, was his experience of all three typical cases he had personally attended. He had, however, at the present time under his care in hospital a case which exemplified the now generally acknowledged fact that the various pemphigoid conditions might merge clinically one into another. This patient was a middle-aged Jewish woman, who had suffered for years from attacks of typical *Dermatitis herpetiformis*, but within the last year she had developed lesions in the mouth, about the vulva, in the groins and in the axillæ exactly like the patient exhibited, and the objective resemblance to *Pemphigus vegetans* was most striking. The condition had cleared up to a surprising extent under prolonged antiseptic baths in January of the present year, but had relapsed in the unhygienic conditions of her home after discharge from hospital. She was now in hospital again for a severe return to her previous condition, and was making satisfactory progress again under the same treatment as before, and this, in spite of the fact that the disease was unfortunately complicated by pernicious anæmia.

Dr. WINKELRIED WILLIAMS showed (1) a case of *skin-lesions on nose and ears—typical Lupus erythematosus*, but the eruption inside nose

was rather suggestive of tubercular lupus. A patch on nose was treated with 5 per cent. tuberculin ointment. In twenty-four hours there was no reaction; in forty-eight hours there was slight but distinct reaction. The patch was more raised, redder, and had an areola, round which showed slight vesication. The same jar of ointment had been used on a typical *Lupus vulgaris*, which reacted in twenty-four hours distinctly, and had a most intense reaction in forty-eight hours; a non-tubercular case of sebaceous hypertrophy showed no reaction with the same jar in forty-eight hours.

(2) *A case for diagnosis.* Patient, a young lady, secretary to medical man, had a hairy naevus on loins at birth. It was now strangely altered; she had been seen by Sir Cooper Perry and Dr. Radcliffe-Crocker in the past, and from her account no very definite diagnosis was made; she had been treated by high-frequency and X-rays. Present condition: An irregular, somewhat lumpy patch, which crossed the middle line, measuring in its longest transverse diameter 21 cm., and 15 cm. in longest vertical line. The hair is now limited to borders of patch. It varies from intense white to reddish-brown, and in few areas dark brown colour. It is irregularly raised above skin level, but by sense of touch it can be detected as extending much more deeply in the skin. It is arranged in irregularly circular lobules. In centre there is a hard, white scleroderma-like patch, depressed below general level and surrounded with a pinkish-brown raised border. Under diascopé a moderate amount of brown pigment, collected in some places in more intense masses, is seen. To the extreme left a dome-shaped raised mass, about size of a shilling, firm to the touch, and separated by normal skin from the rest of the growth. It has of recent years become painful at times; the pain varies in intensity and is shooting in character; the patient always complains of irritation, and has got into the habit of knocking the lesion with her fist. During the past six months it has extended considerably—*i. e.* at least 5 cm. more to the right. Dr. Williams feared the case was developing a malignant phase.

Dr. ADAMSON said he had shown a case almost exactly similar, of which a photograph appeared in the *Transactions*—*pigmented vascular sclerosing naevus* (*Trans. Roy. Soc. Med.*, June, 1911; *Brit. Journ. Derm.*, xxiii. p. 179).

CURRENT LITERATURE.

CLINICAL OBSERVATIONS ON THE PROGNOSIS IN CON-
GENITAL SYPHILIS. MARCUS. (*Archiv f. Derm. u. Syph.*, March,
1913.)

THE purpose of the author in this very detailed and lengthy investigation is to determine statistically the results of specific maternal treatment and the prognosis for the offspring.

His data were collected at Stockholm from the St. Göran Hospital, in which there is a special department for the treatment and care of these unfortunate infants, and in which they remain until they are three years of age. Many of them return in after years for observation, and it is from them that his statistics have been compiled.

He has divided his inquiry into three large groups according to the time of infection of the mother:

I. (a) After conception.

(b) Contemporaneously with, and—

(c) Shortly before conception.

II. (a) 1-2 years; (b) 2-3 years; (c) 3-4 years; (d) 4 years; (e) more than 4 years preceding the birth of the child.

III. Time of infection uncertain.

I (a) Post-conceptional cases: Of these there were thirteen undoubted cases—the latest two months only, the oldest eight months before parturition. Six patients had had no treatment, and of the six children, five had syphilitic symptoms or positive Wassermann reactions. One only was free of both, and died of pneumonia at four months.

Two mothers were treated with salvarsan only, the one with three 4 injections and the other with only one. Both children were born with syphilitic manifestations.

Five mothers received mercurial treatment. Two children manifested syphilis. The mothers of both these children had both been insufficiently treated—the one for nineteen days only with ung. hydrarg. inunctions, the other with ten injections of grey oil.

The three remaining mothers had been thoroughly mercurialised and bore symptom-free (and W.R. negative) children.

These results show that the outlook for post-conceptional infected cases (even in the seventh month) is very bad, and compares most unfavourably, as will be seen below, with the prognosis for children of tertiary syphilitic mothers.

I (b) This sub-group presents very much the same prognostic features as the above. Of thirteen treated mothers, eight were delivered of healthy children with negative W.Rs.; the other five children were born of mothers who had been insufficiently treated, three over too short a period, and two with salvarsan alone. Of seven untreated cases infected coincidently with conception, six were delivered of syphilitic children.

I (c) Pre-conceptional: Two cases only are reported. Both mothers were treated during pregnancy, the one with mercury, the other with mercury and "606." Both children were syphilitic.

II (a) Infection 1-2 years prior to conception, 12 cases: Two cases gave a history of inefficient treatment, and both bore premature luetic infants. Of six efficiently treated mothers five normal children were born; the sixth died of marasmus at four months, without any sort of syphilitic manifestation. Four women had been entirely untreated prior to their pregnancies, and two of these not at all. All four children were born luetic.

II (b) Infection 2-3 years prior to conception, 15 cases: One case only had not been treated at all, and her child was luetic at birth, and resisted most energetic mercurial treatment, dying, at one and a half years of age, of pneumonia. Four women were not treated during pregnancy, and three bore syphilitic children. Ten had been treated previously, and were also treated during pregnancy. Two of them were free of manifestations at parturition, but the child of one of them (whose W.R. was negative two and a half months later) developed a specific rash at two and a half months of age, with positive W.R. Of the remaining eight, four had syphilitic and four normal children, but the efficacy of the treatment in these eight had not been above suspicion.

II (c) Infection 3-4 years prior to conception, 4 cases: Two of these mothers had no symptoms at parturition. One of them had had six inunction cures, but no treatment during pregnancy, and her child was born with both clinical and W.R. proof of syphilis. The W.R. of the child was still + after five years of energetic mercurial treatment, but became ultimately negative. A similar fate befel the child of the other mother. Another entirely untreated mother bore, as we should expect, a markedly syphilitic child. A fourth mother, who had had three inunction cures and four injections of mercury, but no treatment during pregnancy, developed a rash and a positive W.R. three months after the birth of her child, which, although born without symptoms, manifested the same symptoms contemporaneously with her.

Infection at the most four years prior to conception.

II (d) There were ten mothers in this group. None of them had been properly treated and they all had a well-known symptom in common, viz. leucoderma. The histories of eight of the children, treated energetically and consistently at the Lilla Hemmet, is remarkable. They none of them developed a luetic symptom, but inasmuch as they were born before the W.R. reaction came into general use, the serological examination was not made directly after birth, but it was negative in every case at four to five years of age. Of the other two we are told that one born in 1910 had an obstinate + + W.R. at birth, and the other, born in 1911, was also strongly positive without other symptoms, thus suggesting that in all probability there were positive W.Rs. among the other eight cases at birth.

II (e) Infection more than four years prior to conception, 14 cases: All the mothers had passed through the secondary stage, and the age of their syphilis varies between four and twenty-six years. Of two untreated cases both bore manifest syphilitics. The woman with a twenty-six-year old infection had a well-marked tertiary eruption and a positive W.R. Her child was luetic, with W.R. + + +. Of eight children whose mothers had had antiluetic treatment prior to, but not during pregnancy, all had + W. reactions, and only one escaped clinical symptoms of the disease. Six of them died in infancy. The four remaining women had been thoroughly treated both before and during pregnancy,

and although one of the children had a + W.R., both it and the other three remained free of symptoms and had negative W.Rs. at four years of age.

Lack of space forbids a further analysis of this extremely valuable contribution, nor can any idea of the work accomplished by the author be given in a short summary. It must suffice to state that the energetic anti-syphilitic inter-pregnant treatment adopted in this hospital raised the percentage of symptom-free children from 9.8 to 54.4 per cent. The 45.6 per cent. remaining were luetic children, and many of the children, normal at birth, develop syphilitic manifestations later. It is for these that the "Lilla Hemmet" Asylum in the St. Göran Hospital was designed, and it has fully justified its existence.

H. C. S.

STUDIES ON ECZEMA AND THE PYODERMITES. COLE. (*Archiv f. Derm. u Syph.*, March, 1913.)

THE author reaches conclusions which he has numbered and tabulated as follows:

(1) The best bacteriological results were obtained by cultivation on agar slopes.

(2) In eczemata the vesicles are either sterile or contain staphylococci. In moist and impetiginised varieties the most commonly met with organisms were staphylococci or staphylo- and streptococci mixed. Only rarely were the cultures pure streptococci. In squamous eczema there were no streptococci: and staphylococci in small numbers only were the rule.

(3) Impetigo contagiosa and ecthyma were by this observer classed as of pure streptococcal origin. From the suppurating glands in the former pure streptococcal cultures only were obtained.

(4) In cases of *perleche*, streptococcus of the *longus* type appeared to be the most frequent associate.

(5) No streptococci were found in Pityriasis simplex cases.

(6) Both Impetigo contagiosa and eczemas appear to lose their surface streptococci very rapidly.

(7) Serous exudates may contain pure staphylococci, whereas purulent secretions yield sometimes nothing but streptococci (confirmation of Lewandowsky and Dohi's work).

(8) Trade and artificial dermatoses, even the pustulo-follicular eruption produced by croton oil, may be quite sterile, both culturally and microscopically.

(9) There is no apparent relation between the surface staphylococci and streptococci and the various clinical types of Impetigo contagiosa met with in practice.

(10) The type of streptococcus (as proved by its growth and characters on blood-agar) always found in his investigations is stated by Cole to be *Streptococcus longus hemolyticus*. There was only one exception to this rule, and that was in a case of trade dermatitis, in which the organism recovered was *Streptococcus mitior s. viridans*, commonly present in the buccal cavity.

(11) The author repeated V. Denver, Bockhart and Gerlach's, and M. Neisser and Lipstein's well-known experiments with old bouillon cultures of staphylococci, but his results were most irregular. He considered that the alkalinity of the solution was a sufficient explanation of its irritating properties. A previous

mechanical stimulation of the skin appeared at times to hinder, at others to re-inforce this hypothetical characteristic, and he is of opinion that no definite conclusions on the production of eczema by staphylococcus toxins can as yet be drawn.

H. C. S.

CARCINOMA OF THE TONGUE AS A SEQUEL TO EPIDERMOLYSIS BULLOSA (DYSTROPHIC TYPE). KLAUSNER. (*Archiv f. Derm. u. Syph.*, March, 1913.)

THE author claims that the congenital vulnerability of the epidermis in this case is responsible for the early onset of the graver malady in a woman, aged only 25 years. The patient had suffered from the continuous development of bullæ, especially on the mucous membrane of the mouth and tongue, ever since birth, although the typical situations most liable to injury (viz. knees and elbows) had hitherto escaped. There was evidence of former eruptions in the atrophic pigmented condition of the skin of the neck, axillæ, back, and genito-crural regions. Swallowing had often been difficult owing to the frequent but painless swelling of the tongue and buccal mucous membranes. During her detention in hospital several bullæ appeared in the sacral region and elsewhere, and these showed the well-known Nikolski phenomenon (mobility under pressure). Typical carcinomatous glands were present in the submental and submaxillary regions, and a biopsy of the tongue permitted of no alternative diagnosis to carcinoma lingue. The case was considered to be inoperable.

H. C. S.

A CONTRIBUTION TO THE STUDY OF MYOMA CUTIS AND SUBCUTIS. SOBOTKA. (*Archiv f. Derm. u. Syph.*, March, 1913.)

BY his study of a case of pure multiple myomata of the cutis the author has been able to confirm the observation that they closely correspond in their site and arrangement to the lines of cleavage of the skin, and not to the direction of hair growth (Okamura). He also describes the occurrence of excess of reaction to stroking stimulus (which normally produces goose flesh) in his patient's arrectores pilorum, constituting in places quite noticeable elevations with ill-defined borders. This, he claims, is specific for the condition. He concludes the essay with the description of a very rare myoma of the subcutis, which is more correctly described as an angio-myofibroma. The tumour was branching or interlacing in type, and Sobotka calls attention to the hitherto unknown part which the arrectores pilorum may play in the origin and development of tumours of the subcutis.

H. C. S.

SPECULATIONS AS TO THE CAUSATION OF ECZEMA. JAMES C. JOHNSTON. (*Journ. of Cut. Dis.*, January, 1913, p. 3.)

IN this paper the author has chosen acute generalised eczema as the type for investigation—the type characterised by a more or less symmetrical outbreak of erythematous patches on the extensor surfaces of the legs, arms, cheeks, sides of the neck, flanks and buttocks. These are oval in shape, ill-defined, and spread peripherally without clearing the centre. On them small vesicles appear, which

on breaking leave a weeping surface; the lesions then go through the various stages of retrogression, becoming at first crusted, then dry and scaly, and in some chronic cases thickened and lichenified. After discussing the subject generally he reviewed briefly the different theories which have been from time to time put forward as to the cause of the disease. With regard to parasitism he considered that there was no evidence to show that the affection was due to a micro-organism, and pointed out that the primitive lesion and the blood of the eczema patient were sterile, and that when micro-organisms were found in the lesions they were the result of secondary contamination. He did not consider that this type of eczema was locally caused, but that the real basis of it must be found within the body. With regard to disorders of digestion being a possible cause, he considered that though functional disturbances of the digestive system did occur in association with a considerable number of cases of eczema, there was no evidence that they were ætiologically connected. With regard to elimination he had never found that the kidneys were structurally injured in eczema, and if serum albuminuria occurred it passed away under proper treatment; and he considered that cardio-vascular renal disease influenced eczema as little as indigestion. With regard to the nervous system he pointed out that actual lesions of the central or peripheral nervous system are not met with, and that neuritis cannot be regarded as responsible. On the other hand, the incidence of the disease has not infrequently been associated with mental disturbances, shock, etc., and there might be a possible ætiological relation. He considered that "neurotic eczema" was a misnomer, and simply indicated a type of eczema occurring in a nervous subject. Nor did he consider that there was any proof that it is the result of imperfect metabolism of inorganic compounds such as chlorides, phosphates, and calcium, carbohydrates or fats. By a process of exclusion he narrowed down the internal causation of eczema to "a derangement of the nitrogen metabolism, neither anaphylactic nor a defective synthesis of urea, but occurring where for the moment bio-chemistry cannot demonstrate it." He considered "that the cause could not be found in the nitrogen residue, but that possibly the error might lie in proteolysis taking place in the intestinal wall, and the resultant split products might so sensitise the skin in the true sense that it would readily react to irritants from without."

This interesting and scientific paper only serves to show that an internal cause for eczema has still to be found.

J. M. H. M.

THE EXTERNAL ORIGIN OF ECZEMA. FRANK CROZER KNOWLES.

(*Journ. of Cutaneous Disease*, January, 1913, p. 11.)

THE conclusions arrived at in this contribution are as follows:

Fully one quarter of all cases of eczema are of definite external origin. Almost one sixth of all cases of this affection are caused by the occupation of the individual.

Micro-organisms are apparently not the cause of eczema, but probably play a secondary rôle in the affection.

The largest number of cases of the so-called occupation eczemas are seen in the workers in the household and next most frequently in labourers.

Practically every occupation and every irritant may produce an eczema.

The portions of the skin exposed to the irritant determines the site of the outbreak.

The eruption not infrequently extends beyond the irritated areas, at times being noted on distant parts of the cutaneous surface.

The usual type of eruption noted is the vesicular or the squamous.

The eruptions mentioned in this paper have lasted for weeks, months or years, and show a marked tendency to relapse.

It is rather hard to explain the susceptibility of some individuals to certain irritants, while others are not affected, excepting on the theory of a pure idiosyncrasy, an anaphylactic tendency causing sensitisation of the skin.

As dermatitis and eczema of external origin have the same clinical and microscopic pictures, they should be classed under the heading of dermatitis.

J. M. H. M.

CONCERNING EPITHELIOMA OF THE LIP. W. ALLEN PUSEY.

(*Journ. of Cut. Dis.*, vol. xxxi, February, 1913, p. 73.)

At the outset the writer discusses the question of the occurrence of rodent ulcers on the lips which has been doubted by certain writers. So many cases, however, of rodent ulcer in this situation have been reported by reputable observers that it may be an accepted fact. He next refers to the treatment of epithelioma of the lips with the X-rays, and considers that there are numerous cases in which the X-rays may be used in these lesions with success, but that the X-rays do not offer so radical a method of treatment as operation, including the removal of the submaxillary glands. He considers that failure to benefit epithelioma by the X-rays or its aggravation by them is due to imperfect technique in their use and not applying them with sufficient assurance.

J. M. H. M.

REVIEWS.

SOLIDIFIED CARBON-DIOXIDE.*

FAMILIAR as English dermatologists are with the use of the above substance, it appears that we are considerably behind Philadelphia in appreciating its powers and its capabilities to cure the most varied forms of skin-affection. It has remained for Dr. Bernstein to teach us that solid carbon-dioxide is a satisfactory reagent to employ in the treatment of Alopecia areata, morphea and Dermatitis repens, but there is always a certain amount of charm in enthusiasm.

Some of his views on the subject of epithelioma are interesting, as, for instance, the following passage: "It is possible that the senile skin, filled with numerous keratoses and senile scum and telangiectases, which are often the forerunners of epithelioma, is the result of the irritating effect of the actinic rays of light." We are afraid that a senile skin which has got into such a condition as this is beyond the possibility of cure even by solid carbon-dioxide.

J. L. B.

* *Solidified Carbon-dioxide.* By R. BERNSTEIN. Pp. 95. Hammond, Indiana: F. S. Betz Co.

BEAUTY CULTURE.*

THIS book must have acquired a certain popularity, since this is the third edition. It is written for doctors and the educated laity, presumably of Germany, for we are sure that the English laity could not learn all about the effect of X-rays on the skin in a little over four pages of print. And these four pages contain some extremely doubtful statements, as, for instance, that there exists a definite idiosyncrasy to X-rays, and that no larger dose of X-rays than one third of the erythema dose should be applied to the face at one exposure. The author recommends the use of X-rays for acne, seborrhœa of the face, Hyperidrosis nasi, Alopecia areata, and so on, but he does not give particulars of cases treated. The method of paraffin injections is described in a page and a half, and there is, of course, a good deal about face massage, eye massage, massage for double chins, and similar interesting subjects.

He rightly says that beauty culture largely depends on cultivation of the general health, and he praises the outdoor exercise so common in England. But he makes unkind remarks about American women, who are said to be wanting in true womanliness, and he states that the American walk resembles that of a duck, or a man with double dislocation of the hip. Some suitable illustrations by a skilful artist would have distinctly added to the reader's enjoyment of the book.

J. L. B.

VENEREAL DISEASES.†

DURING the past twenty-seven years there have appeared seven editions of Prof. Finger's well-known work, and this, the seventh edition, is assured of a welcome still more enthusiastic than that accorded to any of its predecessors. It is a book of equal value to the student, the practitioner, and the specialist; it deals most exhaustively with all the branches of venereal disease, and it is written in the clearest and concisest manner. In this volume additional matter on the sero-diagnosis of syphilis has been added, and the value and the limitations of the Wassermann reaction are adequately discussed. There are some excellent diagrams showing the *Spirochæta pallida* in different tissues and stained in various ways, and the reproductions from the original drawings have been well carried out. In connection with the subject of extra-genital chancres we have been struck with some statistics which Prof. Finger quotes. The incidence is as follows:

	Genital.	Extra-genital.
Austria: Men	94 per cent.	6 per cent.
.. Women	86 ..	14 ..
Sweden	84 ..	16 ..
Balkan States	50 ..	50 ..

We thus see that in Western Europe, of which we may take Austria as a fair type, about 90 per cent. chancres are genital, 10 per cent. extra-genital. The rather greater incidence of extra-genital chancres in women may be explained by their exposure to infection as nurses and attendants to syphilitic children. In the

* *Die Schönheitspflege*. By Dr. ORLOWSKI. Pp. 132. 3rd Edition. Würzburg. Curt Kabitzsch, 1913.

† *Die Geschlechts-krankheiten*. By Prof. ERNEST FINGER. Pp. 397. 7th Edition. Marks 10. Leipzig: Franz Denticke, 1913.

Balkan States the percentage of such chancres is much higher, while when we come to Russia the percentages are as follows:

	Genital.	Extra-genital.
Government of Wladimir . . .	9 per cent.	91 per cent.
" Rjäsan . . .	26 "	74 "
" Kursk . . .	8 "	92 "

Whether this can be explained by the carelessness and dirtiness of the inhabitants is, perhaps, uncertain, but it appears probable that so many of the young men and women are early infected with extra-genital chancres that few are susceptible to genital infection later on.

With regard to salvarsan we gather that Finger is not enthusiastic. He agrees that it rapidly clears up symptoms in many cases, but he lays stress on some of the unfavourable consequences of the treatment, and especially on the recurrences affecting the nervous system. He calls attention to the nerve symptoms—vertigo, headache, paresis of various nerves, hemiplegia, etc.—which set in six to eight weeks after the injection of salvarsan, and which he thinks cannot be ascribed to any cause other than the drug. The occurrence of such phenomena in the secondary stage, when the spirochæte are most numerous distributed, has made him advise strongly against the use of the drug during this particular period. And he says that the use of salvarsan alone must now be absolutely abandoned. In every case the drug must be used in combination with mercury.

In conclusion, we can strongly recommend the volume as giving a most exhaustive and attractive account of venereal diseases in the light of modern knowledge.

J. L. B.

BOOKS RECEIVED.

Die biologischen Grundlagen der sekundären Geschlechtscharaktere. By Dr. JULIUS TANDLER and Dr. SIEGFRIED GROSZ. Berlin: JULIUS SPRINGER. Pp. 169, 23 figures. Price 8 marks.

Guérison du Tubes dorsal par le sel d'Ehrlich. By Dr. LEREDDE. Reprints. Paris: MALOINE.

The Philippine Journal of Science. Vol. VII, Section B, No. 6, December, 1912.

Über Kindereckzeme. By Prof. Dr. V. KLINGMÜLLER. Halle: CARL MARHOLD. Pp. 33. M. 1.50.

Diagnose und Therapie der Syphilogenen Erkrankungen des Zentralnervensystems. By Dr. M. NONNE. Halle: CARL MARHOLD. Pp. 47. M. 1.50.

Lewis's Pocket Case Book. H. K. LEWIS. Price 1s. 6d. net.

The Philippine Journal of Science. February, 1913.

Progressive Medicine. June, 1913. Philadelphia: LEA and FEBIGER.

Grundriss der Dermatologie. By J. DARIER. Trans. by Dr. KARL G. ZWICK. With Additions by Prof. JADASSOHN. Berlin: JULIUS SPRINGER. Pp. 543. Price 22 marks.

Die Serodiagnose der Syphilis. By Dr. RUDOLF MÜLLER. Berlin: URBAN & SCHWARZENBERG. Pp. 171. Price 7 marks.

THE BRITISH JOURNAL OF DERMATOLOGY. SEPTEMBER, 1913.

HEREDITARY DUPUYTREN'S CONTRACTURE.

By J. L. BUNCH, M.D., D.Sc., M.R.C.P.,

*Physician for Skin-Diseases to the Queen's Hospital for Children; Physician
to the Skin Hospital, Leicester Square.*

THERE is something peculiarly fascinating about the influence of heredity and its effects upon the individual, both from the physiological and from the pathological point of view. The theories of Darwin, Lankester, Bateson and many others are well known, and no attempt to discuss them will be made in this paper, which only places on record a somewhat peculiar transmission to certain descendants of a well-marked pathological condition.

The patients—father, son and grandson—are members of a family the male members of which are said to have been affected with Dupuytren's contracture for the past three hundred years. It is only the male members of the family which are affected, and the disease is only transmitted by the males. The method of transmission differs, therefore, entirely from that seen in diseases such as progressive muscular atrophy, Friedreich's ataxia and hæmophilia. In every case the disease is said to commence at about the same age, to attain its maximum about the same age, and to affect precisely the same fingers of both hands. The pathological condition cannot apparently in any way be ascribed to occupation, as the males of the family have followed very different kinds of trades and professions, such as clergyman, clerk, hotel-keeper, chauffeur, etc. The father and son, now living, whom I have shown at various societies, are respectively hotel-keeper and chauffeur.

The first symptom noticed is a slight curvature, to the ulnar side, of

the little finger, which comes on during the first few years of life. At about twenty-five years of age the little fingers begin to become flexed, and then the same contracture extends to the ring fingers, until the condition shown in the photograph is attained about the age of thirty-five. The father is now fifty years of age, and no advance in the disease has occurred for more than ten years. The son is now twenty-six, and shows commencing flexion of the little fingers. The grandson is three years of age, and only shows the ulnar curving of the little fingers.

The statement that this affection of the hands has been hereditary only in the male members of the family for three hundred years cannot, of course, be verified by me, and depends entirely on the statement of the members of the family whom I have seen.

Some of the difficulties experienced in tracing and rightly estimating the value of patients' pedigrees can be gauged by studying Bullock and Fildes' monograph on hæmophilia in the *Treasury of Human Inheritance*. This is a volume which summarises an immense amount of work, the bibliography alone running to 949 references, while 234 charts of hæmophilic families are included, and 171 instances of females who were mothers are given, 160 of which conform to the so-called "law of Nasse," that the disease is transmitted by the unaffected female—the "conductor." To establish the law that the disease is transmitted only by the apparently healthy female requires that the eleven apparent exceptions shall be explained. Some of these exceptions are cases where the disease has been transmitted through an alleged affected male, the remainder through unaffected males. Some of these cases may be explained by marriage of the male with a cousin who was a conductor. In other cases the following circumstances may account for the apparent exceptions to the rule: In the first case, intermarriage, so that a woman, presumably normal, but in reality a conductor, may marry in a bleeder family and be responsible for his bleeder sons. In some cases such intermarriages are admitted, but there is reason to believe that they may be much more common than is supposed. The change of name in the females makes investigations of this nature extremely difficult. Secondly, males in the earlier generations of a pedigree are wrongly diagnosed as bleeders, with the result that bleeder descendants are presumed to have inherited the disease from such



Left hand of father, aged 50 years.

TO ILLUSTRATE DR. J. L. BUNCH'S ARTICLE ON HEREDITARY DUPUYTREN'S CONTRACTURE.

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males, while in reality the line of inheritance passed out of the family through the maternal side.

These explanations appear reasonable, and there is no really satisfactory reason to think that the disease can be transmitted otherwise than through the unaffected female.

Heredity as exemplified in cases of albinism is dealt with in the recently published monograph by Karl Pearson, Nettleship and Usher. This is a most exhaustive work, with records of a large number of pedigrees, some of which show the marked heredity of piebaldism and albinism, as, for instance, Bishop Harman's leucotic family which has been followed for six generations. Rizzoli has recorded a family in which a white lock on the forehead has been hereditary for six generations, and in fig. 638 is the pedigree of a family in which the characteristic white patch appears to descend only through the females and occur only in the males. But the heredity of albinism does not seem to be the same in all families, for in a case of Gilbert Smith's albinotic patches were present on father and son, and no statement is made as to the skin-affection being transmitted by the females of this family. The pedigree of the Nyassaland piebalds is one of the most interesting, and seems to show that piebaldism in man cannot be considered as "recessive." One of the living males of this family, who is a hybrid, has married a recessive wife, and his children, therefore, ought to be half piebald and half normal. At present he has three children, all piebald. The odds against this are at present 7 to 1, and the nature of further offspring will be awaited with interest.

Up to the present I have been unable to meet with any pedigree either of Dupuytren's contracture or any other disease which approximates to the family with which this paper is immediately concerned.

EIGHTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

A MOST successful annual meeting of the British Medical Association was held in Brighton from July 22nd to July 25th, and one of the most interesting and best attended sections was that of Derma-

tology. The British Medical Association had previously held its last annual meeting at Brighton in 1886, and in that year there was no Dermatological Section, but several important papers were read on matters of dermatological interest by Prof. Liebreich, Dr. Mackey, Dr. Handford and others. Since 1886 many changes have taken place in the world of skin-diseases, but no loss of greater importance has taken place during recent years than that of Sir Jonathan Hutchinson. As a clinical teacher Hutchinson was unique; he had so many interests, such a vast storehouse of experience, and such a prodigious memory, that he was able to focus light from very many points upon the subject he had in hand, so as to leave an indelible impression upon the minds of his hearers. A man of extraordinary industry, his contributions to surgery and to ophthalmology were in themselves remarkable enough, but when we consider the additions which he made to our knowledge of syphilis, especially in his recognition of the later forms of the hereditary disease, and his careful and accurate description of so many of the rarer forms of skin-disease, we feel amazed that one man could have done so much. Full of years, honoured and respected the world over, we may with pride hand on to our successors the memory of Jonathan Hutchinson and his work.

After such a touching reference to the greatest of modern English dermatologists, the President of the Section, Dr. Sequeira, went on to say that the intensity of specialism which is so prominent a feature of modern medicine does not permit the development of such all-round men nowadays, but it is important that dermatologists shall remember that their branch of study is but a part of general medicine. They have learnt much from the consideration of the lines of research carried on in other branches, and especially from the work of the bacteriologist and the clinical pathologist. Dermatologists have undoubtedly contributed much that is of value in return, and may feel proud of their bacteriological study of ringworm and its fungi. The opening discussion was to be on the fungous affections of the glabrous skin, and such a subject showed well the trend of modern investigation. Affections would be discussed which at one time were placed in the great class of eczemas, and which dermatologists now knew to be the inflammatory reaction of the skin to the presence of certain fungi. With the acquirement of this knowledge, accurate diagnosis is

possible, and with it rational and successful treatment. Then, again, our knowledge of the closely related streptothrix organisms had received important additions. At Liverpool last year Dr. De Beurmann gave us a valuable account of his work on the sporotrichia, and we now know that certain gummatous affections which were previously indistinguishable from syphilis and tuberculosis are caused by this type of organism, and, moreover, that in their localised stages they are amenable to treatment by the iodides.

An important advance in syphilology during the year was of the greatest interest to dermatologists. It was the demonstration by Noguchi and others of the *Spirochæta pallida* in the brain in general paralytics and in the cord in some cases of tabes dorsalis. The importance lay in the fact that in many cases the patient came to the dermatologist for the treatment of his early cutaneous lesions. Whether the early diagnosis of syphilis, which is now possible in practically every case, by the demonstration of the spirochætes in the serum from a chancre, or by the Wassermann test, and our better understanding of the necessity for early and intensive treatment would prevent these grave nervous sequels, time alone could show. The whole question of venereal disease must be boldly faced and the general ignorance of the public on this and allied subjects must be bravely and successfully combated, whatever prejudice to the contrary might exist.

Many interesting problems still awaited solution in connection with some of the commonest diseases of the skin, and especially those conditions which are now labelled "toxic." One of the most characteristic of these—Lupus erythematosus—had been chosen for discussion. Many important papers had recently been published on the subject of pellagra, which, like syphilis, was of the greatest importance to the dermatologist, and until recently it was believed that this country was singularly free from the disease. But several cases had recently been reported in England, and the question whether the disease was essentially of toxic origin, or of parasitic origin, was one of immense interest and worthy of the greatest attention.

The first discussion on fungous affections of the glabrous skin was opened by Dr. Adamson, who dealt with them under the following headings :

(1) Ringworm of the glabrous skin, including ringworm of the groin and ringworm of the extremities.

(2) Favus.

(3) Actinomycosis, blastomycosis, and sporotrichosis.

Important additions to our knowledge of fungous diseases are: (1) The inclusion in the group of body ringworms of certain eruptions due to infection by ringworm derived from animals, particularly from the dog, the cat, the horse and from cattle; (2) the final proof that Eczema marginatum of the groin is really a ringworm, and the discovery that many so-called eczemas of the hands and feet are also ringworms; (3) the demonstration that certain forms of favus are of animal origin; and, above all, (4) the discovery of the new disease sporotrichosis, formerly mistaken for syphilis or tubercle, but due to a deep invasion by a mould fungus. The discovery of sporotrichosis was made in America by Shenck in 1898, and two further cases were reported by Hektoen and Perkins in 1900. It was then forgotten until 1896, when Gougerot, in Paris, whilst making a systematic study of atypical forms of cutaneous tuberculosis, again discovered the sporotrichosis fungus. From this time the disease had been studied by many observers, but most exhaustively by De Beurmann and Gougerot, to whom we owe the greater part of our knowledge of the subject. Over 200 cases have now been reported in France and other continental countries and America, but in spite of the fact that dermatologists have been on the look-out for the disease in this country, not more than two or three indigenous cases have been recorded.

The treatment of these cases is now well known to consist in the treatment of iodide over sometimes considerable periods, but the drug fairly fails to effect a permanent cure.

An interesting discussion followed, and some speakers urged the claims of chrysarobin in the treatment of such affections of the skin.

The second discussion, on the nature, varieties, causes and treatment of Lupus erythematosus was opened by Dr. J. M. H. MacLeod, who recalled the fact for over half a century, ever since Cazenave recognised the disease in 1851, and gave it its unfortunate and confusing name, the subject has been one of the favourite themes for discussion, but, in spite of this and the vast literature which has accumulated around the subject, the last word on Lupus erythematosus

has not been said. And there are certain problems connected with it which seemed to him as far from elucidation now as when Cazenave published his historical paper. The introducer dealt with the subject from the point of view of its clinical characteristics, histological characteristics, nature and causation, discussing under the latter heading its relation to tuberculosis and to other toxins. The question of treatment was naturally dealt with fully, and, in the discussion which followed, the general opinion seemed to incline to the view that the disease was of "toxic" origin and must be treated accordingly. But the pendulum swings and is always swinging, and this reporter would not be surprised to find that in the future a much greater stress is laid on the tuberculous origin of Lupus erythematosus.

On the third day of the Section's meeting there was no discussion, but the morning was devoted to papers. The first paper was by Dr. J. L. BUNCH (London), who read a comprehensive paper on *The Uses of Solid Carbon Dioxide Snow in the Treatment of Diseases of the Skin*. In his experience the following conditions were most amenable to such treatment: Angiomata and nævi, hairy nævi, in which the hairs should first be destroyed by electrolysis, and port-wine nævi; rodent ulcer gave excellent results, often with only a single application. Other diseases treated successfully by him with solid carbon dioxide were Lupus erythematosus, Lupus vulgaris, Lichen planus, chronic eczema, corns and warts.

Dr. DAVID WALSH (London) read a paper on *Circulatory Disorders in relation to Alopecia areata and other forms of baldness*, and Dr. GARDINER (Edinburgh) read an interesting paper on a case of *Acne necrotica*, which he illustrated by some admirable photographs.

Dr. HALDIN DAVIS (London) read a paper on *Ointments*, and Dr. W. WILLIAMS (Brighton) one on *The Treatment of Chronic Leg Ulcers*, followed by a paper on *The Modern Use of X-rays in Psoriasis and other Skin-diseases* by Dr. DORE (London).

Dr. L. J. HOBSON (Harrogate) earned the thanks of the Section for his admirable survey of the types of cases most suitable for treatment at the Harrogate spa.

Other papers were read by Dr. PERNET (London) on *Luminal Rashes*, and by Dr. MEACHEN (London) on *Copper in the Treatment of Cutaneous Tuberculosis*.

A final vote of thanks to the officials of the Section brought the proceedings to a conclusion, and it was unanimously concluded that the meeting had been a great success, especially in so far as the Dermatological Section was concerned. J. L. B.

THE SEVENTEENTH INTERNATIONAL CONGRESS OF MEDICINE.

UNDER the able presidency of Sir Malcolm Morris, K.C.V.O., the Section of Dermatology and Syphilography held some most successful meetings in the Medical School of St. Thomas's Hospital, which had been most kindly lent for the occasion by the Governors of the Hospital. The sectional meetings, and the demonstrations of many rare diseases of the skin which preceded them each day, were attended by a number of the most distinguished dermatologists from all over the world, who not only showed a keen interest in the cases, but also contributed some most interesting papers and entered enthusiastically into the discussions. Needless to say, they were heartily welcomed, and both the Secretaries and the British members of the Section did everything they could to render their stay as pleasant and interesting as possible. Of some of the most interesting and important papers we hope to publish abstracts later.

In his opening address the President traced the changes which had taken place in dermatology since the Congress of 1881, and showed how little importance was then attached to the bacteriological origin of skin-diseases as compared with the prominent position which bacteriology to-day holds in the ætiology and diagnosis of diseases of the skin. Our knowledge of fungous diseases had similarly progressed in a wonderful manner since 1881, and Gruby's researches into the ringworm fungi had been amplified and extended by numerous observers since that date. The improvements in treatment and new methods of treatment of ringworm were in everybody's mind, no less than the radical change which had been brought about in the therapeutics of syphilis by the discovery of salvarsan by

the labours of Ehrlich and Hata. The elaboration by Wassermann, Neisser, and Bruck of the serum reaction for syphilis now enabled a correct diagnosis to be arrived at in cases of great difficulty, while in tuberculosis there were available the tuberculin reactions. But this Congress would be especially memorable for the great discussion to be held in the Albert Hall on the treatment and prevention of syphilis.

On Saturday, August 9th, a joint session of the Section of Dermatology and Syphilography was held with the Section of Forensic Medicine, and most interesting contributions were made to the discussion by Professor Blaschko, Professor Finger, Major French, Professors Gaucher and Gougerot, Dr. Leredde and others.

The resolutions passed by the conjoint meeting of the Section of Dermatology and Syphilography and the Section of Forensic Medicine at the Albert Hall mark, we think, a very important change in the attitude of the profession as to the relation of the State to venereal disease. With some dissentients the notification of syphilis was carried, and the meeting unanimously passed the resolution calling upon the governments of the world to place at the disposal of the profession greater facilities for the diagnosis and treatment of this disease.

We are of opinion that anonymous notification would be helpful in getting an idea of the magnitude of the questions at issue, and would further give evidence from time to time of the efficacy of the measures adopted. Anything in the form of notification which would act as a deterrent to the sufferer from seeking advice and early treatment would be useless, and as far as we could gather was opposed to the general sense of the meeting. What especially stood out in the speeches of the Continental as well as the British speakers was the hopeless futility of previous measures based upon compulsion.

That our governments should place at the disposal of every practitioner the same opportunities for scientific diagnosis as is done in the case of diphtheria and typhoid we have long urged, and we hope we shall not have to wait long before Wassermann reactions and examinations for spirochætes will be available everywhere, at the cost of the State if necessary. The provision of better opportunities for treatment in our general hospitals is also an urgent matter, and ought not to wait for the report of a Royal Commission. We trust that the

importance of this aspect of the question will be brought to the notice of our hospital authorities.

THE MUSEUM.

The Museum of the Section of Dermatology and Syphilography was, by the kind permission of the authorities of St. Thomas's Hospital, in the Dissecting Room of the College. This large apartment, which is admirably lighted, was furnished with extensive wall screens and stands, and afforded an admirable site for the display of the exhibits. Several hundred admirable moulages were sent, the largest collection coming from the Skin-Department of the Royal Infirmary, Edinburgh (Drs. Norman Walker and Cranston Low). Prof. Neisser (Breslau) also sent a large number of beautiful models, and an excellent collection also came from Prof. Nobl (Vienna) and Prof. Janovsky (Prag).

A large number of water-colour drawings were sent by Sir Malcolm Morris, Dr. Pringle, Dr. Galloway, Dr. Graham Little, Dr. MacLeod, Dr. Stowers, Dr. Eddowes, and Dr. Sequeira, and some original drawings from the late Sir J. Hutchinson's collection were also exhibited.

Many of the photographs, of which there were several hundreds, were of remarkable excellence. Special note must be made of the remarkable series of micro-photographs shown by Dr. Fordyce (New York), who also showed a fine series of photographs of various cutaneous eruptions. Dr. Grover Wende's photographs of cases from his clinic at Buffalo and Dr. Howard Fox's large series illustrating skin-disease in the negro also attracted much attention. Prof. Gilchrist's histological series were also much admired. Dr. Wickham and Dr. Degrais (Paris) brought 100 photographs illustrating the treatment of skin-affections by radium. Prof. Nobl (Vienna) also sent a large collection. Dr. Adamson sent several series of photographs illustrating syphilis, disease of the nails, Dermatitis artefacta, napkin-eruptions, and recurrent herpes.

Dr. Lancashire sent a series from the Manchester Skin-clinic. Dr. Sequeira exhibited photographs of cases of rodent ulcer cured by X-rays and radium and of cases of lupus cured by the Finsen light, etc.

Prof. Janovsky (Prag) had an interesting series of stereoscopic photographs illustrating various unusual forms of skin-eruption. A series of cultures of ringworm were shown by Dr. Adamson.

In all, there were between 1600 and 1700 exhibits in the Museum, the whole of which were arranged under the supervision of Dr. Sequeira.

A special feature of the sectional meetings was the demonstration of cases. The authorities of St. Thomas's Hospital had placed at the disposal of the Section the Library and the adjacent Materia Medica Museum, which were admirably suited for the purpose. Over 100 patients were shown. These exhibitions were of the greatest interest to the foreign visitors to the Congress.

CURRENT LITERATURE.

ULCUS MOLLE AND DUCREY'S STREPTOBACILLUS. ITO. (*Archiv f. Derm. u. Syph.*, cxvi, 2, April, 1913.)

THIS author has undertaken a laborious series of experiments in the course of his investigation, and has succeeded in the preparation of a streptobacillus vaccine of considerable potency. After describing in detail the media used by other writers from 1897 onwards, he states that the bacillus grows well on a medium composed of defibrinated (sterilised at 60° for two and a half hours) sheep's blood one part or two parts, to agar (sterilised at 100° C. and used at 60° C.) one part. Cultivation at 37° in the incubator for forty-eight hours produces the first generation; the maximum growth is reached in three to four days. The colonies are round, elevated, depressed in the centre, greyish or brownish-grey in colour, non-confluent, fairly firm in consistency, and the size of a pea. The importance of employing newly prepared media only is strongly emphasised. In the third generation growth appears to be accelerated (twenty-four hours), and the organism is still living after fifty subcultures.

His experiments were conducted on guinea-pigs and rabbits, and include the successful treatment of twelve patients, whose buboes appeared to be very strongly influenced by injections of the specific vaccine, without the ulcer itself responding in any way.

His conclusions are of considerable value and should have a marked influence on the future treatment of buboes.

(1) The intra-cutaneous reaction (upper arm) to the vaccine in a patient with Ulcus molle is specific, and certainly an aid to clinical diagnosis in doubtful cases.

(2) Streptobacillus vaccine yields excellent results in bubonic cases. The pain goes in a few hours, the redness in twenty-four hours, and the diminution in size hand in hand with the amelioration of the other symptoms. The time required for cure by this method averages one week. In most cases one injection of 0.5-0.7 c.c. of a vaccine (made from the contents of two culture tubes dissolved in

1 c.c. of normal saline containing .5 per cent. phenol) proved sufficient to effect a cure of the bubo, although the ulcers required local measures.

(3) Ito is of opinion that the bubo is due probably not only to the direct influence of the streptobacillus, but also to the simultaneously produced anaphylactic reaction of the body.

(4) The streptobacillus produces its results by means of an endotoxin.

(5) The emulsion of bacilli used by him was fatal to guinea-pigs in doses over 2 c.c. per 100 grm. weight.

(6) Active immunity could not be produced by prophylactic injections of the vaccine in either animals or men.

(7) The same applies to attempts at producing passive immunity.

(8) Hypersensitisation, either by vaccine injections or the disease itself, is easily achieved.

H. C. S.

THE COMBINED TREATMENT OF EPITHELIOMATA OF THE SKIN WITH CO₂ SNOW AND X-RAYS. FABRY. (*Archiv f. Derm. u. Syph.*, cxvi, 2, April, 1913.)

It is difficult to be quite sure that by skin epitheliomata the author implies what is understood in this country under the name of rodent ulcer, but inasmuch as all the twelve cases described were on the face, and nothing is said about glandular involvement, this condition may be assumed. His method is to freeze the lesion, and a small area of normal skin around it twice, with the CO₂ stick for one minute, allowing the frozen tissue to thaw between the applications. The lesion is then exposed to a full Sabouraud dose of the X-rays on the same or the following day. In only one of the twelve cases described was there a failure to heal with a supple, almost colourless scar. The rationale of the combination according to Fabry is the preliminary lowering of cell resistance by the snow to the destructive action of the rays. The method should not be used indiscriminately, and must be reserved for early cases in which the periosteum has not become involved. The only cure for such cases is the surgeon's knife. In some of the cases a second dose of the rays was considered necessary. Healing always took place under an indifferent ointment.

H. C. S.

AMYLOID DEGENERATION OF THE SKIN. KREIBICH. (*Archiv f. Derm. u. Syph.*, cxvi, 2, April, 1913.)

As the author points out, the references to this condition in the literature are somewhat rare. In his case the typical staining reactions of amyloid tissue, *i.e.* with methyl violet, iodine in potassium iodide with subsequent sulphuric acid treatment, metachromatic effects with polychrome methylene blue and the appearance of shade in the dark-ground illumination were all positive. The skin had been taken from a darkly pigmented seborrhoeic wart in an otherwise healthy old man (72), and the author is of opinion that further histological research on senile skins will reveal the condition more commonly than we should expect. The amyloid substance was irregularly deposited in the papillæ and more markedly in the subpapillary vascular rete.

H. C. S.

MESOTHORIUM IN DERMATOLOGY. KUZNITZKY. (*Archiv f. Derm. u. Syph.*, cxvi, 2, April, 1913.)

THE study at first hand of this author's experience with mesothorium can be confidently recommended. The article is clearly and impartially written, and is illustrated by some admirable photographs of patients before and after treatment. The cost of mesothorium (about £7 10s. per 1 mgrm.) will at the present time prevent its use for any but small lesions, but for certain of these it is admirably adapted, and superior, owing to the absence of violent reactions, to treatment with the quartz lamp and CO₂ snow.

His experiments were carried out with 20 mgrm. in a capsule, which is fixed over the lesion with strapping, like radium, and left in position according to the character of the disease for from 20-60 minutes. The activity of the substance is due to β - and γ -rays, but an additional therapeutic factor must be ascribed to the reactive inflammation produced—a reaction which closely resembles that after application of CO₂ snow and the quartz lamp, but is not severe enough to inconvenience the patient. As compared with radium the rays are softer and the superficial reaction more evident, whilst the deep action of the more penetrating rays adapt it to the cure of epitheliomata and rodent ulcer. Reaction appears first a day or two after the application, and exactly corresponds in situation to the diameter of the capsule. There is at first a bright erythematous patch, which darkens from day to day till at the end of a week it is a brownish-red. About this time serous exsudation begins, and superficial necrosis of the epithelium takes place. These changes are at their maximum at the end of the second week, and the irradiated place is covered with an impetigo-like crust, which, unless treated with ointment, is not easy to remove. In the fifth week, generally, the crust falls off, and a delicately epithelialised spot of a pink colour marks its situation. This gradually becomes paler, and for a time is surrounded by a pigmented zone, which only disappears, according to the length of the original exposure, after some months. Short-exposure results are hardly visible; long exposures produce scars like those of CO₂ snow.

The author's practice has been to give first exposures unscreened, the second behind a thin plate of silver or lead.

The following diseases are very amenable to treatment, and fully described in the text:

Carcinomata and rodent ulcers, warts, both senile and infective, hæmangiomata, Nævus flammeus, Nævus stellatus, and Pigmentosus pilosus. Lupus erythematosus yields at once. Lupus vulgaris is not favourably influenced, and no cures were attained by the use of mesothorium alone.

It is worth noting here that of nineteen cured cases of skin cancer (? rodent ulcer), thirteen were cured outright by one sitting to 40-60 minutes' exposure of 20 mgrm. unfiltered rays.

H. C. S.

UNNA'S BOTTLE BACILLUS. KRAUS. (*Archiv f. Derm. u. Syph.*, July, 1913, cxvi, No. 3.)

IN the course of an investigation published simultaneously with this paper on the ætiology of *Acne neonatorum*, the author found the bottle bacillus first described by Unna, and afterwards by Malassez. In association with the typical

bottle-shaped bacillus were a large number of transitional forms of the same organism, some of which resembled or were identical with the threads of a mycelial fungus. He succeeded in recovering the organism and its varieties from other infants (not necessarily with the seborrhœic type of skin), especially from the naso-labial folds. In adults also, especially in the seborrhœic individual, the bottle bacillus and its mycelial homologue were present. His attempts to grow the organism in the usual media at 37° C. were fruitless, but there was a distinct increase at room temperature on lanolin agar and maltose agar in a few days, and the small, round, greyish-white colonies were particularly numerous in those cases in which the naso-labial smear had revealed an excess of the organism microscopically.

He comes to the following conclusions:

- (1) The bottle bacillus is certainly not a branching mycelium.
- (2) The organisms classed under the heading "bottle bacilli" are probably not bacilli of one type, but pleomorphic varieties of several kinds.
 - (a) Some "bottle bacilli" appear to be true moulds.
 - (b) Other forms would seem to be sporoidal elements of mycelial fungi.

H. C. S.

LUPUS ERYTHEMATOSUS AND TUBERCULOSIS. BLOCH and FUCHS. (*Archiv f. Derm. u. Syph.*, vol. cxvi. No. 3, July, 1913.)

THE association of these two common diseases, which formed the subject of an animated discussion at the Dermatological Section of the British Medical Association meeting at Brighton this year, is ably dealt with in a long and interesting paper by these authors. After reviewing both the statistical and experimental evidence in favour of the view that certain cases of Lupus erythematosus are an expression of the modified action of the tubercle bacillus in a suitable soil, they relate in detail their own investigations in this connection, and reach conclusions which, if their experiments are confirmed by other workers, would seem to prove once and for all that the tubercle bacillus is at any rate directly responsible in some cases of the typical Lupus erythematosus lesions.

The most certain proof of a tuberculous aetiology would, as they point out, be the direct growth of the organism from excised material on a culture medium. This has been done for *Lupus vulgaris* by Lewandowsky, but not as yet by anyone for *Lupus erythematosus*.

The literature contains several records of the finding of acid-fast bacilli in excised sections after treatment with antiformin. These are of fairly recent date, and comprise the names of Arndt, Hidaka, Spiethoff, and Friedländer.

There are only three successful inoculations of the guinea-pig in the literature to date. The first was published by Gougerot (1908). The biopsy was made from a case of *Lupus erythematosus* of the scalp, and the histology of the section excluded *Lupus vulgaris* or any tuberculoid structure.

The guinea-pigs (two) were killed five months later. The first pig proved negative, but the second had tubercles, both of the liver and spleen, and near the point of inoculation two caseating glands which revealed tubercle bacilli. The other case of Gougerot's, although positive, was not quite a typical *Lupus erythematosus*.

In the same year, Ehrmann and Reines published a case of successful inoculation from the typical face lesions in a young man who was also suffering from a tuberculide of the buttock.

The authors' own successful cases of inoculation number four. Each one of these was first histologically controlled by the examination of serial sections, and the existence of the generally accepted tuberculide definitely excluded. Not content with this experiment the authors undertook a simultaneous demonstration of the presence of tuberculous toxins in these excised pieces from three cases. The epidermis was first removed, and the remainder rubbed up with aseptic precautions in a mortar with quartz sand and 8-10 c.c. of sterile water. The filtrate from a Chamberlain filter was then evaporated *in vacuo* to 5 c.c., and a drop of the yellow opalescent fluid inoculated subcutaneously into patients who were the victims at that time of various forms of cutaneous tuberculosis. From all three cases thus inoculated there were positive results in the form of papular tuberculides which reacted locally when tuberculin was injected later, and the histology of which after excision showed a typical tuberculous structure. The authors emphasise the fact that a positive toxin result was only obtained from three out of several investigated cases of Lupus erythematosus, but they maintain that their four successful inoculations and the demonstration of tuberculous toxin in three other cases would argue a tuberculous aetiology in some cases of the condition at any rate. It is probable that in Lupus erythematosus we have to do with bacilli of a modified virulence, for in two of the guinea-pig inoculations it was only after a sub-inoculation into a second animal that their presence was proved. The question is further complicated by a possible alteration of the local resistance to the bacillary invasion.

H. C. S.

THE CLASSIFICATION AND NOMENCLATURE OF ACQUIRED CUTANEOUS SYPHILIS. GEORGE HENRY FOX. (*Journ. of Cut. Dis.*, 1913, xxxi, p. 224.)

In this interesting contribution the writer points out the disadvantages and confusion which has arisen in connection with the generally employed classification of the syphilides, under the headings of primary, secondary and tertiary lesions. He considers that the simplest and most natural division of the syphilodermata is into two classes, viz. the early and the late.

He would divide the early eruptions into three forms, viz. macular, papular and pustular, and the late into nodular, squamous and gummous.

These in turn are further divided into the following varieties:

Macular into roseolar, annular and vitiligoid.

Papular into miliary, lenticular and discoid.

Pustular into acuminate, obtuse and ecthymoid.

Nodular into agminate, circinate and serpiginous.

Squamous into diffuse and circinate.

Gummous into diffuse and tuberos.

J. M. H. M.

GRANULOMA INGUINALE TROPICUM: REPORT OF THREE CASES. JOSEPH GRINDON. (*Journ. of Cut. Dis.*, 1913, xxxi, p. 236.)

THE cases which form the basis of this communication were all in adult male negroes in St. Louis. They were perfectly typical of the disease, of which a

number of cases have been demonstrated in the dermatological societies in this country.

An examination for the peculiar bodies described by Donovan and Carter which were believed to be protozoa gave negative results, nor were spirochætae such as were reported by Wise and MacLennan found in the cases.

Cultural experiments on agar, serum and broth developed only common saprophytic forms and staphylococci. Animal inoculations were also performed but with negative results.

J. M. H. M.

MULTIPLE LYMPHOID TUMOURS OF THE SKIN: REPORT OF A CASE. JAMES MACFARLANE WINFIELD. (*Journ. of Cut. Dis.*, 1913, xxxi, p. 245.)

THE subject of this contribution is a woman, aged 75 years, who presented numerous tumours on the face, forehead, back of the neck, arms, trunk and thighs. These tumours varied in size from a pin's point to a lentil or larger, and in some places were so thickly studded that it was almost impossible to count them. They were brownish-yellow in colour and had a translucent or waxy appearance. Some of the smaller tumours resembled canary seeds deeply embedded in the tissues. The lesions were associated with itching. The general health was in no way interfered with and an examination of the blood revealed nothing unusual at first, but on subsequent examination there was found to be an increase of white cells to 9500. A microscopical examination of the tumours showed that they were lymphoid growths.

J. M. H. M.

MORPHEA-LIKE EPITHELIOMA. M. L. HEIDINGSFELD. (*Journ. of Cut. Dis.*, June, 1913, xxxi, p. 379.)

THE case which forms the basis of this contribution was that of a man, aged 38 years, who presented an irregular roundish morphea-like lesion about the size of a penny on the right cheek near the angle of the mouth. The lesion had started as a small nodule three years previously. The centre of the lesion was slightly depressed, yellowish-white, of the consistence of leather, and was surrounded by a pearly-like irregular border. Histologically, the condition was that of a "basal-cell epithelioma of Krompecher." The paper is illustrated by clinical and microscopical photographs.

Note.—The case is interesting both clinically and histologically. It seemed to belong to the rodent ulcer type of epithelioma, and histologically, the grouping and general arrangements of the epithelial cells suggested rodent ulcer cells, while the actual cells were not so round as those of a typical rodent and appeared from the photograph to have preserved their interepithelial fibrils.

J. M. H. M.

VERRUGA PERUANA: ITS COMPARATIVE HISTOLOGICAL STUDY IN MAN AND THE APE. HAROLD N. COLE. (*Journ. of Cut. Dis.*, June, 1913, xxxi, p. 384.)

ACCORDING to the writer the cutaneous lesions associated with Verruga peruana appear most frequently on the face and extremities, and are of two types, namely milium or nodular. The mucous membranes are also involved, and growths re-

sembling verrucae have been found in the internal organs. Occasionally the eruption may be squamous, vesicular, or even pustular in character. In a patient of Jadassohn's in which the disease was present it was transmitted to apes to the third generation; the monkeys appeared to have no symptoms except the eruption of lesions at the inoculated points which closely resembled those of the patient. In this communication a comparative histological study of both the lesions from the man and the monkey is made and parasites were searched for in the tissue, but with negative results.

The conclusions arrived at were as follows :

The tumours from both the patient and the apes resembled each other very closely in the gross and in their mode of formation and in their constituents.

The tumours were granulomatous in type; they were caused by some unknown organism, probably circulating in the blood and causing an inflammation and obstruction of the lymph-channels, along with subacute, inflammatory changes and necrosis.

As the other granulomata—tuberculosis, syphilis, sporotrichosis, actinomycosis, etc.—have their own significant histological changes, so also *Verruga peruana*, belonging to the same class, had its own characteristic microscopical picture. It was characterised by a dilatation of the lymph-vessels and a choking of their lumina with mono- and polymorphonuclear leucocytes; also by an infiltration around these vessels of plasma-cells, fibroblasts, mononuclear leucocytes and relatively small numbers of polymorphonuclear leucocytes. It was further characterised by the formation and dilatation of a great number of blood capillaries and by an extravasation of much serum and many red blood-cells into the tissues. The lymph-vessels either ruptured at an early stage or dilated to large dimensions when their cellular contents underwent a pyknotic degeneration and hyaline change, with destruction of the vessel and invasion of the mass by plasma-cells and fibroblasts.

J. M. H. M.

NEGATIVE WASSERMANN REACTION IN UNTREATED TERTIARY SYPHILIS OF THE SKIN AND MUCOUS MEMBRANES.

O. H. FOERSTER. (*Journ. of Cut. Dis.*, June, 1913, xxxi, p. 393.)

THE results obtained with the Wassermann reaction in cases of syphilitic lesions limited to the skin and mucosae show failure to give uniformly positive reactions.

It is pointed out that a positive Wassermann reaction is a symptom of syphilis, and, as such, is to be given due recognition, but the result of every Wassermann test must be intelligently interpreted in relation to all other symptoms. The knowledge that a patient with cutaneous or other lesions has a positive Wassermann reaction does not by any means entitle the physician to regard these lesions as syphilitic. Neither does the negative outcome of the reaction necessarily prove that the lesions are not those of syphilis. The test alone does not establish the diagnosis, and the results of clinical experience and observation are not to be subordinated to the positive or negative outcome of the reaction in a given case.

The possibility of error lies in a direction other than the clinical adaptation of the test. Faulty technique, insufficiently controlled reagents and the like produce worthless results. The accuracy and skill of those engaged in serological work must be above all question if their results are to be considered reliable.

J. M. H. M.

ANGIO-LUPOIDE. L. BROcq and L.-M. PAUTRIER. (*Ann. de Derm. et de Syph.*, 1913, No. 1, p. 1.)

BROcq and Pautrier, under the name "angio-lupoïde," describe a rare affection of the skin which they have observed in six cases. All the patients were women between forty and fifty years of age. The lesions occurred only on the face, chiefly on the lateral aspect of the nose near the inner canthus of the eye, and were either single or bilateral and symmetrical. The lesions were sharply defined, flat or distinctly raised, round or oval plaques or small nodules softly infiltrated and of a red-violet colour, sometimes streaked with yellow. The surface was covered with smooth epidermis, which appeared thin, and beneath it could be seen a network of telangiectases. There was no scaling nor atrophy of the skin. The lesions were few in number, usually one or two, rarely four or five; they evolved very slowly, showed no tendency to regression, and were very resistant to treatment.

Histologically the lesions consisted of groups of large nodules, chiefly composed of epithelioid cells, but containing also a few giant-cells, and surrounded by a narrow lymphocytic zone, occupying chiefly the middle and deeper layers of the dermis, though the superficial layer had not altogether escaped. The papillæ had disappeared and the epidermis was much thinned; the superficial layer of the dermis was occupied by greatly dilated capillaries. The collagen and elastic tissue was destroyed in the infiltrated areas and condensed around their margins. Tubercle bacilli could not be demonstrated, and inoculation into guinea-pigs was negative.

Nearly all the patients presented histories suggestive of tuberculosis, while one case had, in addition, Lupus vulgaris and an atypical sarcoid present at the same time.

The authors consider the lesions to be of tuberculous nature; they differentiate them from Lupus vulgaris, Lupus erythematosus, and from the miliary lupoïde of Boeck. They note, however, a close resemblance to the "sarcoïde à gros noyaux" of Boeck or "lupoïde tuberculeuse et en placard" of Darier, but recognise certain differences, notably the fact that the angiomatous element is absent in the latter condition.

A. M. H. G.

SENSORI-MOTOR POLYNEURITIS WITH PSYCHICAL DISTURBANCE FOLLOWING AN INTRAVENOUS INJECTION OF SALVARSAN. J. ABADIE, G. PETGES, and J. DESQUEYROUX. (*Ann. de Derm. et de Syph.*, 1913, No. 1, p. 17.)

THE authors describe the case of a youth, aged 19 years, who contracted syphilis, but was at first insufficiently treated. Two months afterwards, while still in the florid secondary stage, the patient was laid up by a cold resulting from exposure to the rain after severe physical exertion; he also suffered from numerous furuncles and other pus lesions of the skin. An intravenous injection of 0.6 grm. salvarsan was administered, and two days afterwards he began to complain of pains in the lower limbs of a severe lancinating character, with nocturnal exacerbations. This was followed by abolition of the tendon reflexes, atrophy of the muscles and loss of power, which became complete three months after the onset of the pains. At the same time he also showed mental trouble.

characterised essentially by mental confusion. Having reached this point the sensori-motor and mental symptoms gradually cleared up in about a month, so that in about five months from the onset the patient could be considered cured.

The authors discuss the question as to whether the nervous lesions were due to syphilis, influenza, or to the toxic action of salvarsan. Basing their views on the course run by the disease and by the fact that the symptoms cleared up without further antisyphilitic treatment, they are of opinion that the condition was caused by the salvarsan.

A. M. H. G.

RECENT RESEARCHES ON THE ÆTIOLOGY OF PELADE.

SABOURAUD. (*Ann. de Derm. et de Syph.*, 1913, No. 2, p. 88.)

SABOURAUD calls attention to cases of pelade occurring in certain conditions associated with the genital organs. At the same time he does not wish to bring forward any premature theories as to the genital origin of this disease. These are the results of his observations: (1) In women a pelade exists which follows the menopause and also prolonged suppression of the menses. This pelade is either mild or severe. (2) Pelade may come on after ovariectomy. The prognosis is equally variable. (3) In rare cases pelade occurs in the course of pregnancy and also in several successive pregnancies. This pelade appears to be relatively mild. (4) In one instance pelade supervened in a man suffering from double tuberculous orchitis. And in this case the pelade had become permanent and total before double castration was performed.

A. M. H. G.

CONTRIBUTION TO THE STUDY OF "ECZEMA MARGINATUM" OF HEBRA. S. NICOLAU. (*Ann. de Derm. et de Syph.*, 1913, No. 2, p. 65.)

THE author gives an exhaustive *résumé* of the clinical characters and mycology of "Eczema marginatum," and quotes a series of cases, thirty-five in number, under his observation. Specially interesting are six cases of interdigital infection by the epidermophyton, in two of which no other sites were involved.

A. M. H. G.

QUARTERLY SURVEY OF DERMATOLOGICAL LITERATURE.

ERYTHEMAS, INFLAMMATIONS, ETC.

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Angioneurotic Oedema. J. M. LOBSENZ. (*Med. Record*, 1913, vol. lxxxiii, p. 975.)

Artificial Eruptions due to Crude Tar. L. BROCC. (*Ann. de Derm. et de Syph.*, June, 1913, vol. iv, No. 6, p. 321.)

Coccidioidal Granuloma, Case of (California Disease). G. R. CARSON. (*Journ. Amer. Med. Assoc.*, 1913, vol. lxi, p. 191.)

Congenital Pemphigus, A New Variety of the Dystrophic Form of. Chronic and Progressive Ulcero-vegetant Lesions with Pemphigoid Onset, and with Unguial Dystrophy. J. NICOLAS, H. MOUTOT, and L. CHARTER. (*Ann. de Derm. et de Syph.*, July, 1913, vol. iv, No. 7, p. 386.)

- Creeping Eruption.** Two Cases with Recovery of Larvæ. G. L. RUDELL. (*Journ. Amer. Med. Assoc.*, 1913, vol. lxi, p. 242.)
- Dermatitis Artefacta**, Case of. J. C. MACKWOOD. (*Brit. Med. Journ.*, 1913, vol. i, p. 1160.)
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- Morphœa Guttata and the White-Spot Disease.** G. PETGES. (*Ann. de Derm. et de Syph.*, July, 1913, vol. iv, No. 7, p. 415.)
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THE VACCINE TREATMENT OF SKIN-DISEASES.*

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THE treatment of skin-diseases by the subcutaneous injection of suitable doses of dead organisms has now been practised for rather more than six years, and I believe that opinion is practically unanimous that the method has its uses, yet at the same time the results of treatment by this method are still deplorably lacking in uniformity and certainty.

With a view to throwing light upon the causes of this uncertainty and explaining the reason why the method appears to give so much greater satisfaction to some than others, I propose to discuss certain points and to attempt to give my own opinion upon them, based on my own practical experience.

The first question that occurs to me is one as to the method to be used in estimating the amount and frequency of the dosage, namely, Is it necessary or even advisable to use the opsonic estimation for the purpose of regulating the administration of the vaccine?

I may say at once that my own opinion on this question has undergone a considerable change, and this I attribute to the fact that being one of the early workers at the subject, I naturally followed the teaching of Sir Almroth Wright.

In the early days of the vaccine treatment, great stress was laid on the regular estimation of the opsonic index in all forms of vaccine treatment, because it was considered that it was not only the right,

* Report of a paper read at the International Congress of Medicine (Dermatological Section), opening the discussion on the "Vaccine Treatment of Skin-Diseases."

but also the only method of ascertaining the correct dosage and periodicity of injection. Before very long, however, this opinion was modified, and it was considered that in the more acute infections the clinical symptoms were sufficient guide, but still in the more silent infections, such as that of tuberculosis, the opsonic index was a *sine quâ non*.

For three years I carried out careful opsonic estimations in every case which I treated by inoculation in private, and in all the severer cases in my hospital practice, and it was during this period and owing to the results then obtained that I saw fit to modify my views. Up to this time, as I have already said, it was believed that the opsonic index was regarded as the best method of obtaining a real insight into the course of the disease, and although it was conceded that it was unnecessary to carry out its estimation in certain cases, this was only for the greater convenience of the therapist, and not from any distrust of the opsonic index as an indicator of the patient's condition.

During this long period of frequent estimations, however, I observed that in some cases of cutaneous tuberculosis the obvious spread of the disease was accompanied by a high state of the opsonic index. This was, of course, not an original observation of mine, but merely fell into line with the experience of others, and a theory was devised by Sir Almroth Wright to fit it. Let me say at once that although I believe this theory to be wrong, yet it has proved of value in drawing attention to certain facts that, although they had been previously known, had been lost sight of for many years.

This theory was to the effect that although the high index was an invariable sign of a high state of immunity of the blood, owing to the local interference with free serum exchange, the diseased area might still be deprived of the supply of the highly immune blood-plasma. In addition to this extension of a previously existing lesion with a high opsonic index, however, I was able to note another fact which I believed was largely due to the excellence of the skin as a matter for observation.

This fact was the following, namely, that if, as is very commonly the case, a patient is seen in the stage of healing of one virulent boil, while at the same moment he is just beginning to develop one or more fresh ones in previously healthy parts, his index will commonly, if not invariably, be found to be high.

Now in this case there can be no question of a limitation of serum interchange in the parts where the new boils are starting, as they do so in all sorts of places, and in parts that were a few days before quite healthy. Wright's theory, therefore, breaks down in this case, and is accordingly suspect when applied to the other instance, namely, the spreading of a previously existing lesion.

I therefore regard the use of the opsonic index as erroneous, and where it is unaccompanied by careful clinical observation, or allowed to tyrannise over such observation, actually dangerous.

Is, therefore, the opsonic index useless?

My answer to this would be very decidedly in the negative. It is not very uncommon to meet with cases in which both examination and culture show a mixed infection, and it may be important to determine which is the factor which is responsible for the state of the patient. In such a case repeated examination of the index may show that to one or more of the organisms composing the mixture the patient's index is steadily normal, whereas to one or more of the others the index is unusually high, unusually low, or fluctuating. In such a case we shall, I think, be justified in assuming that these latter organisms have an importance in the production of symptoms.

The next point that I should like to take up is the method of action of the vaccine treatment, as it seems to me that this has an importance with regard to the dosage to be employed. Two theories of action have been put forward: first, that the vaccine acts by causing an inflammatory action in the diseased area, and secondly, that it acts by raising the immunity of the body generally, and thus enables it to combat the infection. I would point out that these two theories are by no means mutually exclusive, and that on the contrary it is quite probable that the vaccine acts in both of these ways. If, for instance, one takes the case of a patient with erythema induratum, where one finds dry and indolent ulcers, but no great tendency to spread, the effect of a small injection of tuberculin is found to be followed by a smart inflammatory reaction in the local lesion. This reaction is frequently followed by healing of the ulcers, even after one injection, and it is difficult to believe that this result is attributable entirely to a high state of immunity produced by a single injection. Again, if one observes the series of phenomena which occur on treating Lupus vulgaris by means of old tuberculin, one finds that after each reaction

a certain amount of resolution takes place, and that this improvement tends to cease as the reaction passes off, to be renewed with each successive reaction in favourable cases. In these cases, therefore, it seems to me that we have to do probably with a local tissue reaction which has a favourable influence on indolent lesions.

On the other hand, in a case of furunculosis the course of events is somewhat different. Take the case of a patient who is suffering from boils, which come out at intervals of, say, three weeks. In this case each local lesion heals apparently completely, or at all events disappears entirely from the clinical point of view, and does not tend to relapse. Yet new lesions in previously healthy parts are constantly making their appearance. The effect of a vaccine in such a case may or may not be to influence the boil present at the first inoculation, but, provided that the treatment is successful, the most noticeable effect will be the prevention of new boils. In this case it seems to be difficult to explain the action of the vaccine on any other theory than that of a raising of the previously depressed state of immunity of the patient.

As regards the therapeutic importance of these points of view, I may perhaps say a few words. In the first instance, namely, that of the tuberculosis where we lay especial stress on the value of the local reaction, we should aim at producing a reaction which is within safe limits. If we produce a fulminating inflammation we may set free the infective agent to be carried by the circulation into other, and possibly more vital, organs, and actually determine the death of the patient—a result which there is some reason to believe has occurred in more than one instance. We shall, therefore, content ourselves with very small doses at the start, and we shall not raise the dose so long as a definite local reaction follows the exhibition of any definite amount.

In the other case, however, that of the furunculosis, in which there are periods during which no local lesion is present, we shall aim at raising the dose as quickly as possible to a somewhat high level in order to produce a high state of immunity, and the only limit we set is that we take care not to increase the dose or frequency so fast that we actually depress instead of raising the level of the immunity, and of this we judge partly by the experience gained in previous cases, and partly by the occurrence of new lesions, if we proceed too roughly.

Before passing on to some individual diseases which may be treated by the vaccine treatment, I should like to make myself clear on the subject of general diagnosis and treatment.

I hold it to be extremely important to ascertain everything about the origin of the disease before starting the vaccine, and I think that this point of view has been somewhat neglected by some of the enthusiasts for vaccine therapy.

It is, in my opinion, thoroughly bad medicine to attempt to treat severe acne by inoculation without taking careful measures to cure or relieve any dyspepsia which may be found to be present. Again, I have seen chronic eczema of the lips treated by inoculation of an autogenous staphylococcic vaccine, when the whole trouble was in fact due to the use of an irritating mouth-wash. Such errors are generally avoidable, and may well bring a very valuable method of treatment into disrepute.

I now turn to some special skin-diseases in which the vaccine treatment has been used.

Taking first the staphylococcic infections, we have to remember that with the exception of furunculosis, the origin of which is, in my opinion, by no means clear yet, almost all, if not all, the staphylococcic infections take place on a skin which is already damaged. In furunculosis the vaccine treatment is perhaps seen at its very best. It is quite exceptional to fail in the treatment of this disease, and after a long experience I can recall no case in which I have carried out the whole treatment, including the manufacture of the vaccine, without success. I might point out that this statement does not include cases of recurrent furunculosis of the nape of the neck, because these cases are, in my opinion, not pure furunculosis, being almost invariably associated with comedo or some other factor, which renders success more difficult. Opinions differ as to the best average dose in the treatment of furunculosis, and the modern tendency has been to diminish this considerably. When Wright first brought his treatment prominently before the medical public, with the opsonic index as a guide to dosage, the usual initial dose was one thousand million staphylococci, but of recent years the dose has fallen so much that one hears of repeated doses of less than one hundred millions being given. For some time I followed Wright in this matter of diminishing the dose, until after a considerable period I was reading through my notes of old cases,

when I was struck with the superior results that I had obtained with the early, larger doses.

At the same time I noticed that a good many patients had a boil within a very short time of the first inoculation, and I therefore thought it would be wise to try a somewhat smaller dose at the very beginning. Since this time I have usually given two hundred and fifty millions as the initial dose, and raised it rapidly afterwards. In the actual presence of a boil some workers of considerable experience recommend an extremely small dose, such as from ten to thirty millions, and although I was prepossessed in favour of this method, I can only say that it has not given good results in my hands.

The next question arises, How long are we to continue the inoculations? Here, I think, we must be guided a good deal by the length of the period intervening between the boils. If the period be short—for instance, a fortnight—we soon get an idea as to the value or otherwise of our treatment, and I am inclined to think that if we succeed in keeping a patient free from boils for three months, where his previous period of freedom has been but a fortnight, we may stop the inoculations with reasonable safety. On the other hand, where the boils only appear at long intervals, from two to three months, or, worse still, once a year, in the spring, we have a very much more difficult problem before us. Where the interval is two or three months, I think we ought at least to secure for the patient an interval of freedom double that which he had before treatment, and I am by no means convinced that this is long enough. On the other hand, where the furunculosis is a seasonal attack once a year, I think it is better to endeavour to protect the patient over that season for each year.

In every case where the furunculosis is localised, as on the neck, strenuous efforts should be made to discover the local conditions at work, and to combat these by means of other appropriate treatment.

Passing on now to the impetigo of Bockhart and sycosis, I may say that the former has yielded almost uniformly good results with the vaccine treatment, and the latter has proved, if of long duration, extremely disappointing. One usually finds that even in the worst cases a first inoculation is followed by rapid improvement, leading one to hope for a speedy extermination of the disease. Then at the end of a week or so the pustules begin to reappear, and all subsequent inoculations have very much less beneficial effects. To combat

this I have tried depilating the patient by means of X-rays, and then treating him by inoculation during the whole period, until the hair has grown again completely, but although I have had better results from this method, especially when combined with efficient local anti-septic measures, than by inoculation alone, I must confess that a large proportion of cases have proved refractory unless the radiation has been carried to such a degree that the depilation is permanent, when, of course, the disease has disappeared with the hair-follicles.

My experience of the treatment of chronic, pyogenic, eczematoid dermatitis has been very similar to that with sycosis, namely, that in recent cases one can rapidly induce a cure if one combines the treatment with suitable local measures, but that in long-established cases a remarkable improvement at the beginning of treatment is followed by persistent relapse, which will not yield to further inoculation.

Before leaving the subject of staphylococcic inoculation, there is one point to which I should like to draw attention, namely, its use in Impetigo contagiosa. It is, of course, well known that Impetigo contagiosa is the result of a streptococcic infection, but that the original infection becomes rapidly contaminated with a superadded staphylococcic infection. Impetigo contagiosa is almost invariably very easily cured by means of local measures only, but there are very exceptional cases in which the disease refuses to yield to local measures, and although in such cases a cure generally results after some time, it is a tedious business. In such cases quite a small number of staphylococcic inoculations, usually, in fact, a single one, will bring about the desired cure with great rapidity. I may say that it was Sir Almroth Wright who first drew my attention to this fact.

The streptococcic infections of the skin in which it might be supposed to be of service to inoculate are four in number: The acute superficial streptococcic infection known as Impetigo contagiosa, to which I have already alluded, and which is seldom resistant enough to demand it, the acute deep infection, erysipelas, the chronic (mixed) superficial infection known as the streptococcic dermatitis of Sabouraud, and the chronic deep infection known as chronic relapsing lymphangitis. Of these last three I have had a fair experience of the vaccine treatment. My experience leads me to say that in severe erysipelas suitable doses of streptococcic vaccine often

acts in an almost miraculous manner, not infrequently actually saving life. A single small inoculation—say of five millions—preferably of autogenous vaccine, will usually cause a critical fall of the temperature, and a second or third at about five days' interval will usually cause complete resolution.

In the chronic superficial and chronic deep infections I cannot report such good results, although I have had one or two cases of the latter under treatment for several months.

I next turn to the question of acne. At first, as is well known, acne was treated with a simple staphylococcic vaccine, but since we have been successful in growing sufficient quantities of the microbacillus to make vaccine it has been used a good deal, and not without success. My own experience leads me to regard the vaccine treatment of acne as a useful adjunct to other forms, but I have found that a great number of cases will not yield to it alone. It is not every case of acne that requires internal treatment, but a fairly large proportion do so. Also I find that it is great waste of time in any event to omit a suitable local treatment, and I have not done so now for some time, except for the purpose of demonstrating to students the effect of the vaccine alone. In any case, I have not found that vaccine treatment, either with the mixed vaccine or the bacillus alone, has had any effect in subduing the fundamental seborrhoea.

In tuberculosis we have to distinguish between the different forms, and I will deal with *Lupus vulgaris* first. For three years I carried out the opsonic method of vaccine treatment on several cases of lupus in various stages, and the results at the end of that time could at best be called doubtful. Since then I have tried larger doses of tuberculin R, of new tuberculin, of bacillary emulsion, and lastly of what is generally called old tuberculin. Of these I have found the old tuberculin so vastly better than any of the others that I have now taken to using it alone. It is not, of course, every case of lupus that will benefit by its use, and I take the precaution of making a very thorough examination of all the internal organs before beginning a course of old tuberculin, and even after that I begin very cautiously. The method that I use is that of making steep rises in the dose as soon as one dose ceases to call forth a reaction, and in the early part of the course the rise is usually expressed by doubling the dose. In

one or two cases I have had remarkably good results, and especially so in those cases in which operation has not offered any chance of a favourable issue. I have now a patient under occasional observation who was treated by me four years ago. Her condition was then one of lupus of the nose, in which almost the whole of the nasal cavity was tubercular, the nose was very much swollen and bluish-purple in colour, and the whole of the skin made up of boggy granulomatous material. After six months' treatment the inside of the nose was apparently cured, the airway was good, the outer skin was pale and somewhat shrunken, and dotted over with minute white depressions where previously existing nodules had disappeared.

At the end of a year there was a single recrudescent nodule on the outside, and this I burnt away with chloride of zinc.

After two years more there was again some recrudescence of a superficial patch on one side of the nose, but this yielded to pyrogallic acid, as the patient could not devote the time for another course of inoculation. I have not seen her recently, as she lives far away in the country, but her reports say she is still doing well. The disease had been in existence for years before I began treatment, and had been steadily progressing from bad to worse.

I do not wish to give the impression that I regard inoculation as the method of election in lupus, but in cases where the Finsen light cannot be applied for any reason I consider it is capable of great service.

In tubercular ulcers and in Bazin's disease I have used the same method with considerable success, though I would add that I think more caution is necessary in the matter of dosage in these diseases than in lupus. In Bazin's disease it is difficult to say whether one has cured a case or not since the natural course of the disease is to leave the patient for long periods without symptoms, but I have at any rate cleared away all the existing lesions on many occasions in a comparatively short time. It may be objected that the nodules of Bazin's disease disappear and the ulcers heal spontaneously, and this is true, but the ulcers often persist for many months in an indolent condition, without any sign of healing taking place. In such cases the exhibition of one or two doses of old tuberculin will "freshen" the edges and bases of the ulcers in a remarkable manner, and healing is usually complete in a week or two. There

is no other treatment that I am familiar with which has any marked beneficial effect in most cases of this disease.

Lastly, there is a heterogeneous mass of skin-diseases for which vaccine treatment has been recommended. It is not possible for me to deal with all of these, but there are one or two to which I should like to allude.

The first of these is the chronic ulcer of the leg associated or not with varix. It has been claimed that the chief infection in a large proportion of these is with *Bacillus coli communis*, but although I have carried out a fairly large number of examinations of the bacteria present in ulcers of the leg, I have not come across the *Bacillus coli* as an infective agent, and I do not think that this can be due to my having missed it, as it is an organism which grows exuberantly on ordinary media. The chief infective agents that I have found have been staphylococci, and occasionally streptococci, and the treatment with vaccines made from these organisms has proved disappointing. In one case the vaccine treatment was followed by a rapid improvement for the first few injections, but the improvement was not maintained.

Secondly, there is the distressing ailment, pruritus ani. In this affection it has been claimed by different authors that the infection is a streptococcus and the *Bacillus coli* respectively. Both of these organisms are somewhat easily cultivated from the skin around the anus in cases of pruritus ani, but it is the rule to obtain *Bacillus coli*, and it is not infrequent to cultivate a streptococcus from patients who have no symptoms. I have attempted the treatment of the disease with both of these organisms made into vaccines, but without success, unless other measures were used at the same time, and I have been unable to convince myself of the value of the vaccine injections in such cases.

Finally, there is the case of ringworm of the hairy scalp. When I began to experiment with this I did not expect to be able to cure the disease by producing immunity to the invasion, as the fact that it lived in what was practically dead tissue would seem to preclude this. I did, however, think it possible that by means of a specific inflammatory reaction obtained by the injection of large doses of a vaccine, I might be able to determine the loosening and shedding of the hair, and thus aid in the extermination of the disease. Bloch and Plato have pointed out that the immunity reaction and anaphy-

laxis only occur with *Trichophytosis profunda*, and that marked inflammatory reactions do not occur with the more superficial infections. Nevertheless, I thought it worth while to make the attempt. I accordingly obtained massive cultures of the common microsporon on broth, and my friend, Professor Hewlett, manufactured for me by means of his special disintegrator, a vaccine in which no heat had been used. With this I proceeded to attempt to produce the necessary inflammatory reactions, beginning with very small doses, until I had learned that no ill-effects followed its use. A certain amount of redness of the infected areas appeared in almost all the cases after each injection, but in only a very few could I push this reaction to the required degree. In all, in four cases, I was able without the use of any irritating local applications, to produce a kerionic effect with consequent rapid cure, but finally came to the conclusion that the method was of no practical use. It is interesting to note that in no case was any immunity produced, and unless some "guard" ointment was used, extension to the glabrous parts occurred during the treatment. I may then sum up my experience in the following conclusions:

(1) There are certain infections of the skin of acute nature, in which the usual termination is recovery after a variable time, or perhaps in severe cases, *e. g.* erysipelas, in which death may occur. In these cases the appropriate exhibition of vaccine treatment is of enormous value—in fact it is hardly too much to say that it is the only directly curative treatment.

(2) There are certain diseases, *e. g.* furunculosis, in which, although the individual lesion is of limited duration, fresh lesions tend to appear subsequently. In this class suitable vaccine treatment will alter the course of the disease, and inhibit the occurrence of new lesions.

(3) There are certain diseases whose tendency is to become chronic from the commencement, *e. g.* sycosis. In this class the disease may usually be crushed at its commencement by vaccine treatment, but when well established for a long period it proves very resistant, if not entirely refractory.

(4) In tuberculosis of the skin the method of reaction has some use in the stimulation and clearing up of indolent non-progressive lesions, such as are found in Bazin's disease, and in default of any other means of directly influencing these lesions it is of value.

In *Lupus vulgaris* the method is also of value, but it is not to be preferred to other means, such as the Finsen light, which is incontestably superior. It is probable that an immunising course of tuberculin administered at the same time as the light treatment is of advantage.

THE TREATMENT OF SYPHILIS WITH SALVARSAN.*

BY BREVET LIEUT.-COL. T. W. GIBBARD *AND MAJOR
L. W. HARRISON, R.A.M.C.

WE have investigated salvarsan from the standpoint of the treatment of syphilis in the Army, and in doing so have aimed at discovering (1) how to treat syphilis efficiently with the least expenditure of the remedy, (2) whether salvarsan employed in the manner which has produced the best results in our hands offers any advantage over the exclusive use of mercury, and (3) whether it is a sufficiently safe remedy to justify its routine use for the treatment of syphilis in the Army.

We will consider these questions in this order and endeavour to answer the first two by showing the results we have obtained with salvarsan in treating patients who had previously received no anti-syphilitic treatment. We have purposely not swelled the numbers of cases in our tables with patients who had previously been treated with anti-syphilitic remedies because their inclusion would have complicated the issue.

COMPARISON OF DIFFERENT METHODS OF USING SALVARSAN.

In order to ascertain the most efficient and yet economical method of treating syphilis with salvarsan, on the principle of proceeding from the simple to the more complex, we have treated different series of cases on the following seven plans: (1) a single intra-muscular or subcutaneous injection of salvarsan; (2) a single intravenous injection of 0.6 grm. salvarsan; (3) two intravenous injections of 0.6 grm. with an interval of two weeks between the injections; (4) an intravenous injection of 0.6 grm. followed at two-weekly intervals by three intravenous injections of 0.3 grm.; (5) three intravenous injections of 0.6 grm. salvarsan at two-weekly intervals and four injections of calomel

* Report read at the combined meeting of the Dermatological and Naval and Military Sections of the International Medical Congress, August, 1913.

cream (Hg_2Cl_2), gr. $\frac{2}{4}$ in each, the whole course lasting one month; (6) an initial intravenous injection of 0·6 grm. salvarsan, then nine intramuscular injections of mercurial cream (Hg), gr. j in each, at weekly intervals, and, lastly, an intravenous injection of 0·6 grm. salvarsan, the whole course lasting nine or ten weeks; and (7) a similar course to this, but with injections of only 0·3 grm. salvarsan. Subsequent to each of these courses of salvarsan treatment we have watched the progress of our patients clinically and by means of the Wassermann test. At regular intervals, generally of one month, they have been examined for clinical signs, and once every three months their blood-serum has been tested for the Wassermann reaction. In a certain proportion of cases which have remained persistently free from signs, small doses of salvarsan or neo-salvarsan have been injected six to nine months after the initial course of treatment with the object of provoking a Wassermann reaction if the disease should be only latent, and otherwise to strengthen the value of our negative examination. A number of our patients left the Army before they had been under observation long enough to be of any use to us. Some were transferred to other stations, but we have kept in touch with these by means of question forms addressed to their medical officers, who have also forwarded to us, when requested, at regular intervals samples of blood-serum for the Wassermann test. We are greatly indebted to our brother officers for the help they have given us in this respect.

At an early date we discarded the use of intra-muscular and subcutaneous injections on account of the frequency with which local troubles followed them and the high proportion of relapses. Apart from local troubles, the uncertainty of absorption of salvarsan from the site of an intra-muscular or subcutaneous injection appears to us to be a very great objection to this method of administering salvarsan. Lieut.-Col. W. O. Beveridge, R.A.M.C., has very kindly analysed for us nodules or sloughs which have formed as a result of some of these injections, and has found in them quite large amounts of arsenic many months after the injections which gave rise to their formation. In one case where a cyst at the site of operation in the gluteal region was removed by operation more than a year after an intra-muscular injection of salvarsan, he found in one third of it 0·04 grm. of arsenious oxide. The course, consisting of two intravenous injections of only 0·3 grm. salvarsan in conjunction with nine

intra-muscular injections of mercury, quickly proved to be a failure; relapses occurred in a proportion of the cases before the course of intra-muscular injections was complete, and we abandoned this scheme of treatment. For these reasons we have not included in our results cases treated either with intra-muscular injections of salvarsan or those which received two injections of 0.3 grm. salvarsan with nine mercurial injections.

For the purposes of comparison, the results of other schemes of treatment may be divided into two groups: (1) Those which followed the exclusive use of salvarsan, and (2) those which followed the use of salvarsan in conjunction with intra-muscular injections of mercury in some form. The latter scheme has been subdivided into two classes: (a) A course of three intravenous injections of 0.6 grm. salvarsan at two-weekly intervals in conjunction with four intra-muscular injections of calomel within the same month, and (b) a course consisting of two intravenous injections of 0.6 grm. salvarsan separated by nine intra-muscular injections of mercurial cream at weekly intervals.

Table I shows the results which followed these different schemes of treatment.

TABLE I.—*Number of Relapses which occurred in previously untreated Cases of Syphilis.**

Period of observation from date of last injection.	Treatment.	Total cases.	Relapses.				Percentages total clinical and Wassermann relapses
			Clinical.		Wassermann without clinical symptoms.		
			Actuals.	Percentages.	Actuals.	Percentages.	
Six months.	Salvarsan only.	71	5	7.0	12	16.9	23.9
	Three salvarsan and 4 calomel.	63	2	3.1	10	15.8	18.9
	Two salvarsan and 9 mercury.	132	5	3.7	15	11.3	15.1
Twelve months.	Salvarsan only.	48	7	14.5	9	18.7	33.3
	Three salvarsan and 4 calomel.	52	1	1.9	12	23.0	25.0
	Two salvarsan and 9 mercury.	100	5	5.0	18	18.0	23.0

Note.—From December, 1912, to April, 1913, of ninety-one cases treated with three five-weekly injections of 0.6 grm. salvarsan and ten weekly injections of mercury, none have so far relapsed clinically or given a positive Wassermann reaction.

* The figures in this and the subsequent tables have been brought up to date.

It will be seen that the smallest percentage of relapses, both clinical and to the Wassermann test, followed the administration of two salvarsan and nine mercurial injections, which gave 5·0 per cent. clinical, 18·0 per cent. Wassermann, and 23·0 per cent. total relapses within one year.

As will be shown later, the proportion of relapses, especially clinical, which followed this combined course was very considerably less than that which occurs under treatment with mercury alone, but we think it very probable that with further experience there will be a still further reduction in the number of relapses. It is interesting that the course consisting of three salvarsan in conjunction with four calomel injections, in respect of both remedies a more intensive treatment, has been followed by more total relapses than two salvarsan and nine mercurial injections, and it seems probable that the better results shown by the latter form of treatment are due to the fact that the course was prolonged over a longer period of time. We are at present treating patients with a course of three intravenous injections of 0·6 gm. salvarsan and ten intra-muscular injections of mercurial cream in a period of ten to eleven weeks, but our patients have not been sufficiently long under observation to justify any opinion on its merits, but up to April this year we had treated 91 cases by this method, and none of these have so far relapsed either clinically or to the Wassermann test.

THE ADVANTAGE OF COMMENCING TREATMENT IN THE PRIMARY STAGE.

Besides the improvement to be expected from better schemes of treatment than those we have mentioned, there are strong grounds for believing that when the importance of early diagnosis and prompt treatment of syphilis with salvarsan is more generally recognised there will be a very substantial reduction in the number of relapses.

In Table II are shown the percentages of relapses which followed when treatment with salvarsan commenced in the primary and secondary stages respectively. It will be seen that the advantage of commencing treatment in the primary stage was especially well marked in the Wassermann reaction, though the proportion of clinical relapses was also markedly smaller in the primary than the secondary cases.

It is only fair, too, to mention here that we include amongst

TABLE II.—*Number of Relapses which occurred when Salvarsan Treatment was commenced in the Primary and Secondary Stage respectively.*

Period of observa- tion from date of last injection.	Stage of disease at which treat- ment com- menced.	Total cases.	Relapses.				Percentages of total clinical and Wassermann reactions.
			Clinical.		Wassermann without clinical symptoms.		
			Actuals.	Percentages.	Actuals.	Percentages.	
Six months {	Primary	92	5	5.1	6	6.5	11.9
	Secondary	174	7	4.0	31	17.8	21.8
Twelve months {	Primary	70	3	4.2	5	7.1	11.4
	Secondary	130	10	7.6	34	26.1	33.8

relapses in primary cases all patients who returned with a primary chancre on the site of the original sore, though in some of these cases there is strong evidence in favour of fresh infection from an outside source. For instance, all induration had been absent from the site of the original sore for six or seven months, the Wassermann reaction had been persistently negative during the same time, and patients volunteered the information that they exposed themselves to infection within the incubation period of syphilis, and we think there is a reasonable possibility that the second sore was not a relapse, as we have classified it, but due to a new infection.

The improved methods of diagnosing primary syphilis which are now available justify a hope that before long soldiers will be educated to look with suspicion on every venereal sore, however trivial it may appear, and, helped by the encouragement of their medical officials, will report sick earlier than has been the custom. From a very large number of syphilis case-sheets which we have examined we find that in the Army generally for every soldier who commences treatment in the primary stage five do so in the secondary stage. In the London district the proportion of cases which commence treatment in the primary stage has been steadily rising for the past few years, and of our own cases it is now one primary to one secondary. We attribute this improvement to the fact that we have steadily urged men to report sick early, frequently pointing out to our patients that with a microscope it is easy to diagnose a primary chancre when it is no larger than a pin's head and looks no more

serious than a slight abrasion, and that under efficient salvarsan treatment the prognosis is so much better in the early primary stage.

COMPARISON BETWEEN SALVARSAN AND EXCLUSIVELY MERCURIAL TREATMENT.

In order to compare the results of a course of two injections of salvarsan and nine of mercury, such as we have described, with those which follow the exclusive use of mercury, we obtained from the Director-General, Army Medical Service, permission to examine the syphilis case-sheets of the Brigade of Guards which were returned to the War Office in the years 1906 to 1912. We extracted from the sheet of each case which we considered had been regularly and efficiently treated with mercury for at least a year, either by intramuscular injections or by inunctions, particulars as to the stage at which treatment commenced, the total relapses, and the total number of days lost in hospital and attending as an out-patient. The results are shown in Table III, in which is also shown the total number of relapses which followed a single course consisting of two intravenous injections of 0.6 gm. salvarsan and nine intra-muscular injections of mercury, as well as the total number of days lost in hospital and attending.

The special points to which we would draw attention in this table are (1) the very marked reduction in the number of clinical relapses shown by the salvarsan as compared with the exclusively mercurial cases, and (2) the great reduction in the average number of days lost by each soldier, especially in hospital. It will be seen that the salvarsan cases spent an average of forty-one days less in hospital during the first year than the exclusively mercurial. Considering that about 2000 fresh cases of syphilis are admitted every year to army hospitals, we may reasonably expect that without any improvement on present methods the routine use of salvarsan will effect a total annual saving of between 70,000 and 80,000 hospital days. At present the total number of admissions for syphilis to British army hospitals yearly is about 4000, but only half of these are fresh cases. On the basis of Table III, the routine treatment of syphilis with salvarsan and mercury will reduce the number of relapses so much that the total admissions to hospitals for syphilis should be reduced from over 4000 to about 2300.

TABLE III.—*Total Relapses and Average Time lost by each Soldier in Hospital and attending as an Out-patient under Treatment with Mercury and with Mercury and Salvarsan respectively, during the first year.*

Treatment.	Total cases.	Average number of days in hospital on first admission.	Clinical relapses.				Percentage of clinical relapses.	Average time lost by each man in days.		
			Once only.	Twice only.	Three or more times.	Total number which relapsed.		In hospital.	Attending as an out-patient.	Total.
Mercury alone.	378	42.0	151	115	49	315	83.0	66.2	17.6	83.8
Mercury and salvarsan.	152	23.2	6	0	0	6	3.9	25.2	15.8	41.0

It may be argued that in considering the case of exclusively mercurial treatment we have taken account of only clinical symptoms, and that the reduction in the number of relapses following salvarsan treatment is due simply to suppression of symptoms. It will be granted, however, that if the percentage of positive Wassermann reactions is, and remains, lower after salvarsan treatment, the evidence is against exclusively mercurial treatment. The Wassermann test was not applied to the mercurial cases shown in Table III so regularly as to the salvarsan, but from tests applied to 124 other patients immediately after the last course of mercurial injections in the first year the Wassermann reaction was found to be positive to the original test in over 34 per cent., while in forty-two cases tested only four months after completion of this course the percentage of positive reactions had risen to over 57. The original Wassermann test was applied to 289 patients at Rochester Row only three months after the completion of two years' regular treatment with mercurial injections, and the reaction was found to be positive in over 42 per cent. In the salvarsan series the conditions of examination were more favourable to the discovery of positive Wassermann reactions than in the mercurial; thus, considerably longer periods of rest from treatment had elapsed, and the blood-serum of each of the salvarsan cases was tested at least three times in the year, so that there was a better opportunity of discovering a positive reaction than in the

mercurial cases, which were tested only once. In spite of these adverse conditions, the total number of positive Wassermann reactions obtained throughout the year from the salvarsan cases amounted to only 15·4 per cent.

There is another point in favour of the routine use of salvarsan for the treatment of syphilis in the Army, and it is this. Our examination of the syphilis case-sheets to which we have referred showed that quite 50 per cent. of soldiers who contract syphilis pass to the Army Reserve, or leave the Army for some other reason, before they have completed one year of treatment, and it seems to us important, if only for the sake of the efficiency of the Reserve, that, if possible, the treatment should be completed within the first year.

SAFETY OF SALVARSAN.

Under the question of the safety of salvarsan we will consider deaths, reactions immediately following intravenous injections, and cranial nerve disturbances.

(A) *Deaths after Salvarsan Injections.*

The question of death immediately following an injection of salvarsan is one which is naturally of considerable interest to all of us. Our own experience in this respect has been very fortunate, since in over 2500 intravenous injections we have not experienced any fatality. From a consideration of the literature on this subject it seems to us that fatalities may be divided into three classes: (a) Those which could have been avoided by attention to well-known contra-indications and by careful technique and after-treatment; (b) deaths due to pulmonary embolism; and (c) those in which a series of epileptiform convulsions followed by death has occurred on the third to the fifth day after the injection; the explanation of the last-named is still in dispute. We can serve no useful object by discussing the first two of these, but we would like to offer our views on the third class, in the hope that we may assist in arriving at a correct explanation of the cause of death in these cases, and possibly at some agreement as to the best means of preventing it. There are two explanations of these fatalities. One is that they are due to an exacerbation of cerebral syphilis, a Jarisch-Herxheimer reaction in

the central nervous system; and the other, that they are due to salvarsan poisoning. It is urged in favour of the first of these explanations that the patients are almost always in the late primary or early secondary stage, when it is so common for the meninges to be affected, and that the cerebral changes found post-mortem are consistent with the view that death is due to poisoning with endotoxins of *Spirochæta pallida*. It must be admitted, however, that if death is due to the release of a large amount of spirochæte endotoxins, it is extraordinary that this should occur so extremely rarely after the first injection, and that it should have such a long incubation period as two or even five days. Our experience of the Jarisch-Herxheimer reaction as it is exhibited in other parts of the body shows that it occurs within a few hours of the first injection. Further, we would expect that an exacerbation of cerebral syphilis so severe as to cause death would surely be accompanied by profound pathological changes in the cerebro-spinal fluid. By the kindness of Capt. A. T. Frost, R.A.M.C., we have had an opportunity of examining the cerebro-spinal fluid and organs of a patient who died in epileptiform convulsions on the fourth day after an injection of salvarsan. The particulars of the case are as follows: The patient, a soldier, aged 20 years, suffering from early secondary syphilis, but without any headache, was treated with two injections of 0.6 gm. salvarsan, with an interval of two weeks between the two injections. The urine was tested before each injection and found to be normal. No reaction followed either injection beyond a slight and transient headache after the second. The correctness of the technique of the second injection is vouched for by the fact that Captain Frost administered it himself, and seven other patients injected on the same day suffered no reaction whatever. The symptoms commenced on the morning of the fourth day with severe vomiting, which was followed by a series of epileptiform convulsions, and the patient died in coma twelve hours later. Captain Frost removed 18 c.c. of cerebro-spinal fluid some hours before death, and it is possible that it may have been slightly contaminated with blood. He found in it twenty cells per c.m., but a differential count was not made. The further tests were carried out by one of us, and the reaction of the fluid to the Wassermann, Nonne, Lange, and Noguchi tests was in each case negative. For the Wasserman test an amount of fluid

corresponding to ten times the quantity which is usually taken of blood-serum was used. Beyond the slight increase in cells, therefore, there was no evidence of syphilitic change in the cerebro-spinal fluid of this case. The portions of brain sent to us were taken from a temporo-sphenoidal lobe and internal capsule, but in neither of these were we able to find microscopically any evidence of syphilis, nor were there any capillary hæmorrhages such as have been reported by other workers. On the other hand, the renal tubules were filled with blood-cells. It seems to us that we must recognise the possibility of an idiosyncrasy to salvarsan in a very small minority of patients. Fortunately this idiosyncrasy does not become dangerous unless the salvarsan is repeated in full doses at intervals which are too frequent, and for this reason we are now adverse to repeating full doses of salvarsan after intervals which are shorter than one month. We admit that the risk of death after more frequent repetition is very slight, but if the same object is served by spacing the injections well out and filling the intervals with mercurial injections there is no point in running any risk.

(B) *Reactions after Intravenous Injections.*

The causation of febrile reaction, vomiting, diarrhœa, and a few other unpleasant symptoms immediately after intravenous injections of salvarsan has occupied the attention of numerous workers, but opinions are still somewhat divided on this question. There can be little doubt that before Wechsellmann pointed out the importance of using only freshly distilled water and freshly prepared salt solution reactions were much more frequent and severe than they are now. It has not been our experience, however, that the use of freshly distilled water has entirely abolished fever, diarrhœa or vomiting. We have made observations regarding these symptoms in all our hospital cases with a view to ascertaining their cause. From time to time we have made slight alterations in technique and watched their effect on the prevention of reactions; for some time we took somewhat elaborate steps to ensure that the solution entered the vein at blood-heat, and at others we have varied the strength of the salt solution, but beyond the great reduction which followed the introduction of freshly distilled water and freshly prepared salt solution, no modifica-

tion in our technique has been followed by any marked reduction in the proportion of cases which suffered from reaction.

It has been stated that fewer reactions follow when the water has been distilled in glass vessels rather than metal; Hort and Penfold believe that a fever-producing agent is aspirated into the metal still as it cools down and that this explains salvarsan fever; others have suggested that water from a metal still contains metal which acts on the salvarsan and makes it more toxic. We had used an automatic metal still before these suggestions were made, and before deciding to discard it in favour of glass we fitted to it a device to ensure that air which was aspirated into the still when it cooled down should be filtered through dry cotton-wool. The alteration does not appear to have made any marked difference in the number of febrile reactions, nor was the proportion further reduced in a series of cases for which the solutions were prepared with water which was trebly distilled in a Jena-glass still. Lieut.-Col. W. O. Beveridge very kindly analysed a large quantity of our distilled water, but found in it neither metals nor organic matter. Finally, we have injected fifty-three patients each with 300 c.c. of the salt solution we use in the preparation of salvarsan. One of these patients, a very nervous one, had a temperature of 100° F. on the same evening, but none of the remainder suffered from any reaction whatever. We feel, therefore, that the fever and other symptoms which have followed intravenous injection in a certain proportion of our cases, in spite of our using freshly distilled water, cannot be attributed to the distilled water, the salt solution, or to any contamination with metal.

There are two further explanations which have been advanced to account for the reactions after intravenous injections of salvarsan; one is that they are due to endotoxins from dead spirochaetes, and the other that they are due to the direct action of salvarsan. In order to arrive at some conclusion on this point we have classified 976 cases, under different headings, according to the stage of the disease at which they received the injection, the size of the dose, and whether the injection was for the first, second, or third time, and have worked out the proportion of cases under each heading which suffered from diarrhoea, vomiting, rigor, and fever respectively.

We should say that in the great majority of cases these symptoms were very slight; in fact, in the whole series only 45 out of 976

patients had a temperature over 102° F, and only 14 of these reached 103° or over. Subjective symptoms in most of the febrile cases were generally so slight that if the temperature had not been taken we would have said that no reaction had occurred. Similarly in the case of vomiting and diarrhoea, in the very great majority of cases where these symptoms were recorded, they amounted to little more than some "retching" and a few loose motions.

The numbers of cases shown in some of the groups are too small to allow us to judge their indication anything but broadly. If we may accept it that spirochaete endotoxins would be released in greatest quantities after the first injection of patients in the primary and early secondary stages, we would expect that symptoms due to endotoxins would be most frequent in these cases. Fever occurred most frequently after the first injection of patients in these stages, but diarrhoea and vomiting occurred more often after injection of patients in stages of syphilis when we would not expect any great release of spirochaete endotoxins. The incidence of diarrhoea and vomiting seems to vary very closely with the size of the dose; this does not follow with febrile symptoms. As far as our observations go they seem to indicate, therefore, that diarrhoea and vomiting are due to direct toxic action of salvarsan, while febrile symptoms may conceivably be due to spirochaete endotoxins. Our analysis has further shown us that some patients are more susceptible to salvarsan than others, since we found repeatedly that certain patients invariably suffered from some vomiting or diarrhoea after each injection.

(c) *Cranial Nerve Disturbances.*

Regarding the occurrence of cranial nerve disturbances after salvarsan injections, our experience is only fragmentary, but we include it in this report as an addition to the evidence collected by other workers. In our letters of inquiry concerning the progress of our salvarsan cases we have made a special point of asking the medical officers concerned to inform us of any disturbance of cranial nerves. Of the 1052 cases we have ourselves treated with salvarsan two have subsequently suffered from these affections. The details of these are as follows: Gr. B—contracted syphilis, April, 1912, and was treated with 0.9 gm. neo-salvarsan on June 18th, 1912, and

1.2 gm. neo-salvarsan on June 25th, 1912. The Wassermann reaction was positive on August 2nd, 1912, and on August 17th, 1912, an injection of 0.3 gm. of salvarsan was given. No mercury was administered. On October 18th, 1912, he was transferred to Rochester Row, suffering from facial paralysis, and the Wassermann reaction was strongly positive. The cerebro-spinal fluid contained 30 cells per c.m. and gave Lange's gold reaction. In the succeeding ten weeks he received three intravenous injections of salvarsan and ten intra-muscular injections of mercury. At the end of this treatment the cerebro-spinal fluid was examined and found to have five lymphocytes per c.m., and the Wassermann, Lange, and Nonne reactions were negative. The last note, made on January 14th, 1913, showed some improvement, as he was able to whistle slightly. In this case the points of note appear to be that the initial treatment was inadequate and that improvement followed salvarsan treatment when the facial nerve had become affected. Further, the examination of the cerebro-spinal fluid at the end of this subsequent treatment showed that, at any rate, salvarsan had not produced pathological changes in the cerebro-spinal fluid. The second case contracted syphilis in November, 1911, and was treated with regular injections of mercury, but suffered from frequent relapses and was transferred to Rochester Row on September 13th, 1912, with the mucous membrane of the mouth in a macerated and sodden condition, and with psoriasis of the elbows and knees. He was treated with two injections of 0.3 gm. salvarsan, but no mercury was given as he had previously shown some intolerance of this remedy. In January, 1913, he was again transferred to Rochester Row, this time suffering from the same condition of the mucous membrane of his mouth and with facial paralysis. The Wassermann reaction was negative in the blood and cerebro-spinal fluid. The cerebro-spinal fluid contained eight cells per c.m. and gave negative Lange and Nonne reactions. He was treated with more salvarsan, in conjunction with mercurial injections, but has shown no improvement. The points of interest in this case are the very small quantities of salvarsan which were administered in the first instance and the negative findings in the cerebro-spinal fluid at the time he was suffering from facial paralysis. Considering that it is now admitted that syphilitic cranial nerve disturbances are constantly associated with pathological changes in the

cerebro-spinal fluid, and considering also the very small doses of salvarsan administered to this patient, it is open to question whether the facial paralysis had anything to do either with syphilis or salvarsan.

Two other cases of cranial nerve disturbance after salvarsan administered in other hospitals have also been treated at Rochester Row. In the first, facial paralysis developed six months after an intramuscular injection of salvarsan and immediately after a motor trip. He was treated by us with an intravenous injection of 0.6 gm. salvarsan, and the facial paralysis had disappeared on the third day after the injection. No examination of the cerebro-spinal fluid was made, so that it is impossible to say whether the facial paralysis in this case was due to syphilis or not. At any rate it is fair to say that the second dose of salvarsan could have had no toxic effect on the facial nerve, even in its damaged condition, seeing that the patient had recovered by the third day after it.

The remaining case shows the importance of having a clear understanding as to the causation of these cranial nerve disturbances, since we believe that if the patient had been promptly treated with salvarsan when the nerve disturbance first made its appearance much damage might have been prevented. This patient was treated with 0.6 gm. salvarsan for secondary syphilis in February, 1912. No other treatment was administered until July, 1912, when he was admitted to hospital suffering from paralysis of the ophthalmic branch of his left fifth nerve, with conjunctivitis and anaesthesia of the left forehead and temple. He was treated with mercury and potassium iodide by the mouth, but the cornea became more and more opaque till November, 1912, when he was transferred to Rochester Row. On transfer the corneal opacity was so great that perception of light had disappeared. The Wassermann reaction was positive in the blood and cerebro-spinal fluid. The cerebro-spinal fluid contained 140 lymphocytes per c.m. and gave positive Lange, Nonne, and Noguchi reactions. Under treatment with repeated small injections of neo-salvarsan, in conjunction with mercury, the anaesthesia disappeared, but the cornea cleared only slightly and there was no improvement in vision. In this case the cerebro-spinal fluid showed evidence of syphilis of the central nervous system, and the improvement at such a late stage indicated

that much might have been done by the prompt administration of salvarsan before the nerve had become irreparably damaged.

The evidence which has been produced by Benario and by Dreyfus to prove that cranial nerve disturbances after salvarsan are due to syphilis and not to the remedy must be familiar to all, and we would only add the valuable evidence of Capt. A. T. Frost. This officer had six cases of cranial nerve disturbance in the first hundred he treated with salvarsan. Five of them had received a single injection of 0.4 gm. salvarsan, or less, but no other treatment. The sixth had two doses of 0.3 gm. at twelve days' interval, and no other treatment. Capt. Frost treated five of these cases with full doses of salvarsan as soon as the nerve disturbances appeared, and the symptoms disappeared in all of them.

We have related a case in which we think that the withholding of salvarsan as soon as the signs of cranial nerve disturbance appeared was responsible for much of the subsequent damage, and we think that the sooner this "bogey," the so-called neurotropic effect of salvarsan, is destroyed the better. The lesson we learn from these affections is that the initial course of salvarsan must be prolonged and thorough; that careful subsequent observation must on no account be neglected; and if, unfortunately, the patient subsequently shows signs of cranial nerve trouble, no time must be lost before commencing salvarsan treatment, since delay involves a risk of irreparable damage to the affected nerve.

SUMMARY.

(1) We have obtained the best results with a course of two intravenous injections of 0.6 gm. salvarsan and nine intra-muscular injections of mercury prolonged over nine or ten weeks, but the indications at present are that a course of three salvarsan and ten mercurial injections will be followed by still better results.

(2) Under salvarsan treatment primary cases suffer so much less from relapse than secondary that it is worth every effort to ensure that as many patients as possible are treated in the early primary stage.

(3) Even if no improvement is made in the method of using salvarsan, which has given the best results in our hands, its routine

use for the treatment of syphilis in the Army is likely to effect an annual saving of 70,000 to 80,000 hospital days—an economy equivalent to the cost of keeping a battalion of infantry in hospital for three months.

(4) Salvarsan is a sufficiently safe remedy to justify its routine use for the treatment of syphilis in the Army, but it must be entrusted only to those who are thoroughly acquainted with its indications and contra-indications and the technique of its administration.

CURRENT LITERATURE.

A NEW METHOD OF INTRAVENOUS INJECTION OF NEO-SALVARSAN. PAUL RAVAUT. (*La Presse Médicale*, March 1, 1913, No. 18, p. 171.)

THE new procedure consists in using concentrated solutions in distilled water. The amount of impurities which may be present in the distilled water is diminished, and the use of normal saline solution, employed to avoid hæmolysis, is no longer necessary. The technique is simplified, and no rubber tubing is needed. Ravaut has given 184 injections to 47 patients. The injections are well supported, and the therapeutic results are the same as with the more dilute solutions.

The injections are made with a 20 c.cm. syringe into the vein of the arm. The proportion of distilled water employed is as follows:

Ten c.cm. distilled water for doses of 0.45 grm. and 0.60 grm. neo-salvarsan.

Fifteen c.cm. distilled water for doses of 0.75 grm. and 0.90 grm. neo-salvarsan.

The injection occupies only 15–20 seconds.

H. G. A.

SHORT REMARKS ON SALVARSAN AND NEO-SALVARSAN INJECTIONS. E. SCHREIBER. (*Munch. Med. Wochenschr.*, No. 36, September 16, 1913, p. 1993.)

SCHREIBER has also employed the concentrated solutions of neo-salvarsan as recommended by Duhot,* Ravaut,† Strauss‡ and Stern§ with complete success. The oxygen present in water and air leads to oxidation of the neo-salvarsan and production of highly toxic bodies, and this risk of auto-oxidation of neo-salvarsan is naturally diminished by the use of less water. He advocates the use of normal

* Duhot. *Revue Belge d'Urologie et de Dermatologie*, February 1, March 1, 1913.

† Ravaut. *La Presse Médicale*, March 1, 1913. (Abstracted above.)

‡ Strauss. *Derm. Wochenschr.*, 1913, No. 14.

§ Stern. *Munch. Med. Wochenschr.*, April 1, 1913.

saline solution in preference to distilled water, even in the concentrated solutions, in order to avoid hæmolysis.

Shreiber dissolves 0.75 grm. neo-salvarsan in 10 c.cm. normal saline solution, or injects with an ordinary 10 c.cm. syringe. The needle is inserted first and the syringe attached when blood flows, in order to avoid injection of the concentrated solution into the subcutaneous tissues.

H. G. A.

ON A NEW METHOD FOR INTRAVENOUS NEO-SALVARSAN INJECTIONS. C. ALEXANDRESEN-DERSEN (Bukarest). (*Munch. Med. Wochenschr.*, July 22nd, 1913, p. 1601.)

THERE is a general agreement that intravenous neo-salvarsan injections demand a number of strict precautions, any deviation from which is apt to be followed by harmful effects. Such evil results are attributed by some to bacterial uncleanness of the water employed, by others to chemical bodies (alkaline silicates, lead and copper salts) or to the sodium chloride of isotonic solutions, or to the oxidation of the neo-salvarsan during the preparation of the solution. Salt solution has therefore been replaced by dilute solutions in distilled water. But to this solution the objection has been made that a hæmolytic action may set free egg-albumen bodies which may induce an anaphylactic condition. To avoid these results Ravaut employed neo-salvarsan in 10-15 c.cm. of distilled and sterilised water injected by a 20 c.cm. syringe.

Alexandresen-Dersen, in order to eliminate any possibility of hæmolysis, has recently employed neo-salvarsan solutions of 0.39-0.60 c.g. in 1-2 c.cm. of distilled and sterilised water.

He has given 40 such injections—in several patients five consecutive weekly injections. All patients have taken the injections well, without pain, headache, or rise of temperature. A few who suffered from cardiac trouble had no discomfort.

The *technique* is carefully described. A 1-2 c.cm. Luer syringe with 7 cm. long platinum needle is sterilised in the spirit flame and filled with sterilised and distilled water from a 10 c.cm. flask. The small end of the neo-salvarsan tube is passed through the flame and the end filed off with a flame sterilised file. The contents of the syringe are injected into the tube and stirred for one to two minutes with the needle until dissolved. The solution is then drawn up into the syringe and injected into a vein, the first needle being changed for a fine 2-3 cm. long needle, avoiding injection into the vein wall. The author suggests that the firm of Meister Lucius and Brüning should supply hard Jena glass flasks containing 2 c.cm. of distilled and sterilised water, sealed so that no oxidation is possible. The advantages of this method are: no complicated apparatus; shortest possible time for the period of injection and consequently greatly diminished risk of oxidation of the neo-salvarsan; no other help is required; no hæmolysis takes place, the injection is quite painless.

H. G. A.

THE BRITISH JOURNAL OF DERMATOLOGY. NOVEMBER, 1913.

TWENTY-FIFTH ANNIVERSARY OF THE FOUNDATION OF THE BRITISH JOURNAL OF DERMATOLOGY.

TWENTY-FIVE years ago the first number of the *British Journal of Dermatology* was published, and in celebration of this important anniversary I have asked my predecessors in the Editorial chair to send me communications for publication in this issue. Unfortunately Dr. H. G. Brooke, who, with Sir Malcolm Morris, first undertook the duties of Editor, found himself unable on account of ill-health, which we all most sincerely regret, to give me a contribution. I have, however, the kindly and cordial co-operation of Sir Malcolm Morris, Dr. Pringle, Dr. Galloway and Dr. MacLeod. The three former have dealt with the story of the earlier years of the Journal, and as the later history is so well known to our readers, Dr. MacLeod and I have contributed articles on interesting cases which have been recently under our care.

J. H. SEQUEIRA.

RETROSPECTS.

(1) BY SIR MALCOLM MORRIS, K.C.V.O.

Editor, November, 1888, to April, 1891.

THE Journal which is now celebrating its twenty-fifth anniversary cannot claim to have been the earliest of dermatological periodicals. Journals representing this branch of medicine were already in existence in Germany, France, Austria, Italy, and the United States, and the time was fully ripe for the founding of a similar publication for the

United Kingdom. But the note which the Journal struck from the beginning was one of catholicity. The very first number contained a notable contribution from the facile pen of Unna of Hamburg; among other foreign dermatologists who wrote in the early numbers were Brocq and Wickham of Paris, Fnnk of Warsaw, Feibes of Aix-la-Chapelle, and Ohmann-Dumesnil of St. Louis; and before it was three months old arrangements were made between its editors and those of the *Monatshefte für praktische Dermatologie* by which original articles sent to either periodical might be translated and published in the other. That the Journal made a strong start will cheerfully be allowed by all whose memories carry them back to that period or who may have had occasion to consult the first volume. Besides the contribution from Unna, the first number contained an article by the distinguished leader of medical thought who is now President of the Royal College of Physicians, Sir Thomas Barlow, treating with characteristic acumen and lucidity of a case of Diabetes mellitus presenting skin lesions resembling those of Xanthoma diabetorum, but without pigmentation; and another by the late Sir Jonathan Hutchinson. And among other contributors to the first volume, in addition to those already named, were Stephen Mackenzie, Leslie Roberts, Marmaduke Sheild, Walter Smith of Dublin, Allan Jamieson of Edinburgh, and last, but not least, H. G. Brooke of Manchester, who shared with me the labours of editorship. I regret that the state of my old colleague's health prevents him from making a direct contribution to this commemorative number.

Many and striking are the changes that have come over the periodical press during the last five and twenty years. In most journals that have lived so long there is little likeness to be detected between their present aspect and that which they wore a quarter of a century ago. That is true of the *British Journal of Dermatology* in one particular. The refined and realistic half-tone illustrations which now at once elucidate its teachings and embellish its pages are certainly to be preferred to the crude chromo-lithographs which stare one in the face as one turns over the leaves of the first volume. But in all other respects neither Dr. Brooke nor myself, as the original editors, nor Mr. H. K. Lewis, who is still, as he was at the beginning, the publisher, need deprecate the institution of comparisons between the now and the then. At first the page was rather smaller than it

is now, though on the other hand the parts contained a rather larger number of pages. But with the second volume the page was enlarged to its present ample and dignified dimensions. I have already spoken of the eminent authorities who contributed original articles to the early numbers; but in an educative sense hardly less importance attaches to the summaries of articles that were appearing in foreign periodicals, and it may fairly be claimed that this part of the Journal's work was done with not less thoroughness in those early days than it is now by Dr. Sequeira and his scholarly collaborators.

The original editorial arrangements subsisted until the end of the second volume. It was then felt to be desirable that the Journal should be produced under the guidance of a directorate, with one of their number as acting editor. The first directorate was composed of H. G. Brooke, Radcliffe Crocker, Colcott Fox, Malcolm Morris, J. F. Payne, and J. J. Pringle, the last of whom undertook the duties of acting editor. I must leave Dr. Pringle and others to tell the story of the later course the Journal has run, but as unofficial chairman of the directorate from that time to this I cannot forbear to testify to the spirit of harmony that has uniformly animated our counsels. Though not the beginning of my connection with the medical press, I am able to look back upon my long association with the Journal as one of the pleasantest episodes in a varied and extensive editorial experience.

(2) BY DR. J. J. PRINGLE.

Editor, January, 1891, to December, 1895.

From January, 1891, to December, 1895, I performed the duties of Acting Editor of our Journal. No task I have ever undertaken has been attended by so much pleasure and profit to myself. The keen desire to show that British Dermatology not only "had its being" but also "moved" inspired every member of our Editorial Committee; our frequent meetings were sources of unalloyed enjoyment; no "interests" were allowed to clash; all worked together for good; my team required no driving! When pressure of work in connection with the International Congress of Dermatology to be held in London in 1896 compelled me to relinquish my post of honour, I did so with bitter regret, but with the pleasantest of memories and associations.

No epoch-making discovery illuminated these five years. The Koch "craze"—alas, that it should ever have become so!—was on the wane, and no spirochæta had yet been observed to wriggle its tortuous path across our microscopic fields. Röntgen had not yet "shed his ray" far into our realm, and the mycology of the ringworms had only partially been made manifest by Sabouraud and others. But dermatological facts, carefully observed and recorded, were accumulating in growing numbers, and various new morbid types of skin-disease were recognised or differentiated in the United Kingdom as elsewhere.

In 1891 we were still largely dependent upon foreign sources in our material, but Brooke and Radcliffe-Crocker made specially valuable additions to our knowledge of the Keratoses.

In 1892 Savill described with much vividness and wealth of detail a mysterious epidemic of apparently contagious Dermatitis which prevailed in the previous year in several of the London infirmaries, the exact nature of which is still undetermined, no similar epidemic having since occurred. Patrick Manson familiarised our readers with *Tinea imbricata* as observed by him in Hong Kong, while Malcolm Morris fully re-established the "entity" of his *Xanthoma diabeticorum*. An admirable paper by Brooke on *Epithelioma adenoides cysticum* still ranks as a classic on that much-vexed subject. The second International Dermatological Congress held in Vienna in September provided much excellent "copy," especially with reference to *Mycosis fungoides*, *Leukæmia cutis*, and the lymphatic affections of the skin.

In 1893 we were enabled to dispense entirely with foreign assistance. The subject of Dermatitis herpetiformis was popularised by Stephen Mackenzie; Alfred Francis made a notable contribution to our knowledge of *Lymphangioma circumscriptum*, and Colcott Fox, in a characteristically thorough and illuminating paper, described for the first time in this country the *Erythema induratum* of Bazin, a condition now familiar to the merest tyro.

The January number for 1894 contained Radcliffe-Crocker's original paper on *Erythema elevatum diutinum*, and Malcolm Morris again distinguished himself by a lucid summary of our then knowledge of the Lichens in an address read before the International Medical Congress at Rome, to which but little can even now be added. But the outstanding feature of the year was undoubtedly the appear-

ance in our May number of the first report of the Transactions of the Dermatological Society of London, which, although founded in 1882, had hitherto abstained from publishing any account of their admirable work. In the following number was published the first instalment of the Transactions of the more recent, and perhaps less eclectic, Dermatological Society of Great Britain and Ireland, ushered in by a masterly address by Byrom Bramwell of Edinburgh, on the Thyroid treatment of skin-diseases. From this time onwards the reports of the proceedings of these two sister societies appeared regularly in the Journal until the date of their fusion to constitute the Dermatological Section of the Royal Society of Medicine. It has always been a source of gratification to me that the numerous and interesting cases exhibited at these Societies, although necessarily reported with the greatest brevity, have been always invariably quoted as authoritative in all foreign journals.

The principal paper of my farewell year of management was that by H. G. Adamson on the parasites of ringworm, which summarised and controlled—after much personal observation and experimentation—the numerous brilliant antecedent articles by Sabouraud on the subject which had appeared at frequent intervals in Paris since 1892, as well as other important cognate contributions by Rosenbach and others in Germany, and by Leslie Roberts in this country, all of which he submitted to shrewd, albeit modest, criticism. As Adamson was then my clinical assistant, and his admirable piece of work was carried out under my eye in circumstances of exceptional difficulty, I may, perhaps, be justified in pluming myself as well as the author on the fact that in this case, at least, the flower has fulfilled the promise of the blossom.

And so I hand on the story to my friend Galloway.

(3) BY DR. JAMES GALLOWAY.

Editor, January, 1896, to December, 1904.

AFTER a short period of initiation into the mysteries of journalism under my old friend, Dr. Pringle, I was asked to undertake the Editorship of the Journal for the year 1895. I did so feeling a considerable amount of responsibility, but the friendly relations which

existed among the members of the Editorial Committee were of such a nature that the request was peculiarly pleasing to me as an evidence of their confidence, and as offering an opportunity of doing a share of service for dermatology in London.

The scope of the Journal has widened considerably since those days, and it has been a matter of much satisfaction to me to note that this spirit of confidence and friendship has throughout been a marked feature in our history.

In 1895 much of the work which appeared in the Journal owed its origin to discussion, and to suggestions received at the meetings of the Dermatological Society of London, one of the most useful and interesting medical societies now amalgamated with the Royal Society of Medicine. Many of the patients brought to the Society, though suffering, no doubt, from diseases familiar to our predecessors, were being studied under new circumstances, and thus had, to most of us, the interest of new discoveries. The careful and minute clinical observation which has been always so characteristic of British medicine was prominent in these discussions, but had recently received a new stimulus as the result of the laborious pathological investigations of our colleagues in Germany. In most of the work appearing in the Journal these two influences were easily discoverable. The prominence of the clinical side is very striking throughout; the pathological and histological investigations were brought to a practical bearing in the definition or the treatment of disease.

In the pages of the Journal the influence of our French colleagues was also apparent; letters from Paris frequently made their appearance, and the work of Sabouraud on the mycology of the ringworms and allied diseases began to show their effects.

Dr. Aldersmith was giving the benefit of his large experience of ringworm to the Society, and Dr. Adamson's early work on the subject was of very special value in helping to define the views of British dermatologists.

An interesting foreshadowing of the enormous development of recent years in the treatment of syphilitic infection was seen in the short note of an attempt made by the late Mr. Edward Cotterell to treat syphilis by means of an antitoxin derived from the blood-serum of patients suffering from that disease.

In 1896 an event of much importance in our work was the preparation and the assembling of the 'Third International Congress of Dermatology'. Those who attended still speak of this meeting as one of the most successful international conferences devoted to this branch of medicine. Dr. Colcott Fox was known to all of us to be studying the subject of ringworm with the indefatigable industry and conscientiousness which has always characterised his work. His important papers on the subject of the "Plurality of the Fungi causing Ringworm" made their appearance during this year, coinciding in time with the International Congress; and Dr. Sabouraud brought with him to the Congress a large collection of beautiful specimens illustrating his work on the hyphomycetes causing ringworm. We were thus given an opportunity of seeing Sabouraud's work at first hand, and comparing it with the observations, now familiar to most of us, of Colcott Fox and Adamson.

A reminiscence of editorial difficulties in connection with Dr. Fox's papers still remains in my mind. Dr. Fox had the collotype plates illustrating his articles made under his own careful directions by an engraver employed by himself. These plates were most generously presented to the Journal by Dr. Fox. The Editor, however, remembers to this day the difficulties he had in convincing the engraver that it was not advisable to make the plates of any other size than that which would fit into the form of the Journal. His efforts were often unavailing, and thus many of the plates illustrating Dr. Fox's article had to be most unfortunately cut in order to allow of their publication. On looking over the volume of the year, memories of our numerous discussions on this point still recur to mind.

Among other interesting papers appearing in the Journal was one by Sir Stephen Mackenzie on *Erythema exudativum multiforme*, a subject in which he was greatly interested and on which he made many contributions to medical literature. His paper appeared as a consequence of a remarkable case of purpuric erythema described by Sir J. Fayrer, then Surgeon-Captain of the Royal Horse Guards.

In 1897 the influence of the revival in the study of tropical diseases was shown in the Journal. Various papers dealing with tropical dermatology bulked prominently in our pages, much of the information on these subjects being derived from medical men then actually resident in the tropics.

Echoes of the Congress of the previous year were still apparent in the interesting contributions of Professor Neisser and Dr. Justus on syphilis.

Two new features of some interest are noted in the Journal of this year, namely the appearance of short articles by Mr. Skinner, Pharmacist to the Great Northern Central Hospital, on the pharmacology of drugs and applications used in cutaneous diseases. Mr. Skinner's articles were highly appreciated and we were fortunate in having the series. The second is the quarterly survey of current literature, which still remains a useful feature in our Journal.

In 1898 the work appearing in the Journal attained a very high level. Many of the older friends of the Journal, Sir T. McCall Anderson, Dr. Thin, Dr. Crocker and Dr. Jamieson contributed papers, and the interest felt by younger men was shown in important papers by Dr. Whitfield and Dr. MacLeod.

A paper, reminding us of the studies of our predecessors, on "Syphilis among British Troops in Portugal, 1812, and in India, 1896," appeared under the motto *Eadem scena agitur, sed alibi*, by Dr. George Ogilvie; and contributions by such old and tried friends as Dr. Walter Smith, Dr. Wallace Beattie, Dr. Norman Walker, Dr. Pringle, Dr. Stowers and Dr. Pernet do not fail to bring pleasant recollections and cause for thought on turning over the pages of the Journal of this year.

In 1899 one of the early papers of the late Dr. Nevins Hyde on Blastomycetic dermatitis was published, opening up a new chapter in the history of the infective cutaneous disorders. We frequently have had the advantage of contributions from other lands; and occasionally students from abroad, studying in London, have published their work in our journals. A study on *Urticaria pigmentosa*, by Dr. Brongersma, now of Amsterdam, is an example of the latter.

The late Sir Jonathan Hutchinson was always greatly interested in our work, but it was rare to secure a contribution from him; publications in which he was personally interested demanded nearly all his time and energy, but the report of a paper read at the meeting of the Dermatological Society of Great Britain and Ireland on "Diseases of the Nails, with Special Reference to their Significance as Symptoms," was a contribution of much interest in the characteristic Hutchinsonian vein.

In 1900, among other papers of much interest, Dr. Crocker gave one of his graphic clinical studies on "Winter and Summer Eruptions"; Dr. Whitfield, his interesting study on "The So-called Nevus Cells of Soft Moles"; while Dr. Colcott Fox made a contribution to a discussion which is still active in his well-remembered report on the tuberculides, presented at the International Congress in Paris.

In 1901 and immediately preceding there had occurred the very extraordinary epidemic of chronic arsenical poisoning from drinking beer which occurred throughout a large area of the Midlands and North of England. It will be remembered that much attention was paid to this epidemic, both from the medical and economic aspects. The dermatological aspects were carefully studied, and the results published in our Journal by Dr. H. G. Brooke and Dr. Leslie Roberts. Their account still remains as one of the most complete discussions of the clinical aspects of this type of arsenical poisoning.

We have always appreciated the kindly interest taken in our work by our colleagues in America. In 1901 very good evidence of this is shown by the papers of Dr. James Johnston of New York, Dr. Schamberg of Philadelphia, and the careful work of Dr. Ormsby in collaboration with Dr. MacLeod. Dr. MacLeod's skill and knowledge was freely placed at the disposal of his colleagues, as is shown in the paper mentioned with Dr. Ormsby, and the well-known paper with Dr. Colcott Fox on "*Parakeratitis variegata*." Contributions by Dr. Graham Little and Dr. Sequeira are noteworthy of this year.

In 1902 the discussion on *Lupus erythematosus* and its relationship to general diseases and to tuberculous was attracting much attention, as evidenced in the papers from Dr. Sequeira, Dr. Wilfred Ward, and others.

An important feature of the year was the clear evidence appearing in our pages of the study of the newer methods of physical treatment in diseases of the skin, especially by radiotherapy. The close association between Dr. Unna, of Hamburg, and English dermatologists was recognised, not only by his being selected to give the annual oration before the Dermatological Society of Great Britain and Ireland, but by his choice of subject, namely, the "History of Eczema in the Last Century in England."

The Journal and Editor had the advantage of Dr. MacLeod's work as Assistant Editor during the year.

In 1903 contributions by Dr. Arthur Hall and Dr. Allan Jamieson were noteworthy features, and Dr. Stowers, one of the most faithful friends of our Journal, gave his experience on the subject of *Mycosis fungoides*.

In 1904 the severe epidemics of smallpox in America, which gave rise to much discussion at the time, received especial note in our Journal by Dr. Corlett's well-illustrated paper read before the Annual meeting of the Dermatological Society of Great Britain and Ireland. Dr. Leslie Roberts contributed one of his philosophical discussions on dermatological subjects, which have too rarely made their appearance in the Journal, on "Non-parasitic Cutaneous Reactions."

In this year Dr. MacLeod was co-editor of the Journal and the following year undertook the whole responsibility, in the efficient manner known to all the readers of the Journal.

Looking back over these years of my editorship two outstanding features remain in my recollection: first of all the gratitude I felt for the continuous assistance and help which I received on all sides, and my appreciation of the valued friendships then formed; second, a feeling of thanks to the colleagues who gave me the opportunity of obtaining such a thorough drilling in dermatology. The urgent necessity of keeping abreast of medical literature not only extends the knowledge of the subject on the part of the student, but develops a critical sense and the instinct of knowing what is of permanent value and what is of evanescent interest only, and this remains as a possession of great service to anyone who has had the opportunity of such a discipline.

A CASE OF XANTHOMA TUBEROSUM MULTIPLEX ASSOCIATED WITH TUMOURS ABOUT THE JOINTS.

By J. M. H. MACLEOD, M.D.

Co-Editor, March, 1904, to December, 1904; Editor, January, 1905, to December, 1910.

THE case which forms the basis of this contribution was so extensive in distribution, striking in the clinical picture it presented, and peculiar in the association of the xanthoma of the skin with marked changes in the joints, that it merits a more detailed description than was given of it originally when it was demonstrated by the writer at the Dermatological Section of the Royal Society of Medicine in June,

1910 (see *Trans. Roy. Soc. Med.*, 1910, and *Brit. Journ. Derm.*, 1910, xxii, p. 267). Since that time the patient has been seen regularly at Charing Cross Hospital at intervals of about two months, unless on one or two occasions when he developed attacks of bronchitis and attended more frequently, and the knowledge regarding the case has been in consequence considerably amplified.

Description of the case.—The patient was a spare, active-looking man of medium height, and was forty years of age when he first came under observation at the hospital in 1910. His hair was dark, his skin soft and slightly pigmented, and his face florid owing to the presence of numerous dilated capillaries, especially about the malar prominences and nose, the result of exposure to inclement weather and sunlight in his work as a labourer. He was alert, intelligent to talk to and of a nervous temperament.

Family history.—The family history, as far as could be ascertained, had no ætiological bearing on his disease, and there was no record of xanthoma either in his own family or among his relatives.

Past history.—Up to the age of thirteen the patient had enjoyed excellent health, but at that time he had a mild attack of smallpox, from which, however, he made a good recovery with little pitting. The skin-affection did not appear until he was about twenty years of age. Previous to that time his skin had been perfectly healthy, and there were no nævi present to suggest a possible congenital origin for any of the lesions. At the time of the onset of the disease he was working as a labourer on a railway in Wales. The affection was first noticed on the sides of the neck as opaque yellowish patches and streaks which were smooth on the surface and not definitely raised above the surrounding skin. The lesions were not associated with itching or any other subjective symptom, nor was there any disturbance of the general health connected with their appearance. Soon after the xanthoma was noticed, however, he began to suffer from occasional attacks of stiffness associated with pains of a rheumatic character in his wrists and knees. Since that time the xanthoma had been slowly progressive and now involved extensive areas about the trunk and shoulders, arms and hips, while the diseased joints had become enlarged and deformed from hard swellings beneath the skin, and the movements of the wrists had become so restricted in consequence that the patient was unable to use a pick or shovel, and had

to fall back for employment on the casual work of a night watchman or some other such light job. In spite of the extensive involvement of the skin and joints his general health had been well maintained, and there had been no constitutional symptoms pointing to disorders of the liver, kidneys or other internal organ. There was no history of his having had syphilis. During the last two years, chiefly from irregular employment and insufficient or unsuitable food, his general health had been failing and he had had several attacks of bronchitis.

Present condition : Skin.—The general appearance presented by the patient was a most striking one (Fig. 1). The face was florid from telangiectases, the eyelids were covered with xanthomatous patches, sheets of xanthoma extended down the neck, while the wrists were irregularly swollen and presented a deformed appearance. The full extent of the affection was only revealed, however, when the clothes were removed, when it was found that the disease occurred in a singularly symmetrical fashion on the shoulders, axillæ, chest, back, hips and flexor aspects of the elbows.

Face.—The xanthoma was most marked in the eyelids, where there were thick yellow nodules and plaques, which rendered them heavy and stiff to open and shut. Xanthomatous plaques of a dull orange tint were also present at the sides of the nose near the alæ nasi, and extending down the furrows towards the angle of the mouth on both sides. On the cheeks and nose were numerous small yellowish papules about the size of a pin's-head, and situated on a reddish basis of dilated capillaries. On pressure with a diascopé these became paler, the redness was obliterated, and they persisted as yellow macules. These lesions were singularly instructive, and pointed to the initial phase being a dilatation of a group of capillaries associated with inflammation and a fatty infiltration. As they became older the yellow tint gradually spread to the periphery, and tended to darken to an orange colour, the lesion at the same time becoming more defined and finally raised above the surface. The ears were free of the disease, and the beard only presented a few small yellow nodules. Where large lesions occurred, as about the eyelids, they were made up by the coalescence of a varying number of small nodules.

Neck.—The neck (Fig. 2) was extensively involved and surrounded by a sheet of xanthoma, which ended irregularly in small islets which stretched down to near the clavicles. This yellowish sheet was

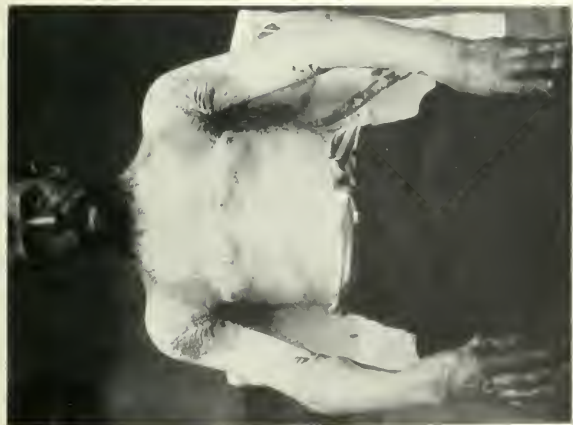


FIG. 1.



FIG. 2

TO ILLUSTRATE DR MACLEOD'S CASE OF XANTHOMA TUBEROSUM MULTIPLEX.



PLATE II.



Fig. 3.



Fig. 4.

TO ILLUSTRATE DR. MACLEOD'S CASE OF XANTHOMA TUBEROSUM MULTIPLEX.

divided up on each side by horizontal and oblique fissures caused by the movements of the neck.

Trunk.—On the trunk the affection was most marked about the axillæ, both axillary folds being covered by xanthomatous sheets, which spread out, both behind and in front, in a fan-like manner, forming large patches, as seen in Fig. 3, which ended in an irregular border, beyond which was a number of small yellow or orange-tinted lesions about the size of a split-pea. The sheets, which had a leathery consistence, were broken up at the folds by deep fissures, resulting from the movements of the joints. The deepest of these fissures extended upwards and outwards, while the more superficial radiated from the periphery of the patch towards the centre. The deeper fissures had a papillomatous base, which was moist from an offensive discharge, obviously the result of a secondary inoculation with pus micro-organisms. Beneath the nipples and to a less extent on the sides of the abdomen the skin presented a mottled appearance from the presence of numerous small xanthomatous papules and nodules. On the back the most marked lesions consisted of the patches behind the axillæ, in addition to which were numerous small discreet lesions and a certain number of superficial atrophic scars where the reddish lesions had involuted. Patches of xanthoma were also present on the hips and over the sacrum, the sacral patch extending into the perinæal fold and around the anus.

Arms.—On the flexor aspect of both elbows (Fig. 4) were raised, hard xanthoma tumours made up by the coalescence of a number of hard nodules varying in size from a split-pea to a bean. These were orange-tinted and the skin over them smooth and shiny.

There were no tumour lesions on the common situations for the disease, namely, the extensor aspects of the elbow or the knee. The hands were unaffected, and on the lower extremities it did not spread further down than the hips. The mucous membranes were not attacked, and although it occurred around the mouth it did not involve the red part of the lips nor extend into the buccal mucosa.

Changes in the joints.—Equally remarkable were the changes about the joints, especially the wrists, elbows and knees. These changes had developed synchronously with the skin-affection and had progressed equally insidiously. The affected joints were all irregularly swollen and deformed. The wrists were most markedly involved, and on the

front of the right wrist there was a hard mass of cartilaginous consistence about the size of a hen's egg, which interfered with the movements of the joints, especially flexion, while just above it on the ulnar side there was a harder oval mass about the size of a pigeon's egg which seemed to be adherent to the bone. Somewhat similar growths, though not so large, were present in connection with the other affected joints. The skin over these swellings was freely movable and unaffected and the tumours appeared to be growing from the deep structures about the joints, such as the tendon sheaths or even the actual periosteum of the bone. There was no tenderness or pain associated with them. A radiogram of the wrist (Fig. 5) showed faint shadows corresponding to the swellings, and erosions and irregularity of the bone opposite them. The exact nature of the swellings was uncertain, but on palpation they suggested hard fibrous masses and had probably a pathogenesis similar to the fibro-xanthomatous lesions in the skin, as in the case recorded by Cranston Low (*Brit. Journ. Derm.*, 1910, vol. xxii, p. 109).

General examination.—A physical examination of the patient failed to reveal any definite internal derangement which might account for the affection. The heart-sounds were normal, the pulse full and regular, and the arteries showed no sign of atheroma. In the lungs the respiratory movements were normal, but on auscultation a few sibilant *râles* could be detected after coughing, indicating bronchitis.

The liver was not enlarged and there was no history of his ever having had jaundice. An examination of the blood failed to detect any abnormal constituent, and repeated examination of the urine showed no trace of sugar or albumen. His digestion seemed to be perfectly good and he did not complain of constipation.

Histo-pathology.—A commencing lesion about the size of a lentil was excised from the arm for microscopical examination; this was of a dull orange tint, becoming pinkish towards the edge, and was only slightly raised. Sections of it were cut in paraffin and stained with various dyes to demonstrate the different elements, especially with osmic acid and Sudan III to stain the fat. An examination of a number of sections showed that the principal changes were present in the corium, and that the xanthoma was the clinical expression of an ill-defined fibro-fatty mass extending down from the sub-papillary layer

PLATE III.



FIG. 5.—Radiogram of right wrist.

TO ILLUSTRATE DR MACLEDD'S CASE OF XANTHOMA TUBEROSUM
MULTIPLEX.



PLATE IV.

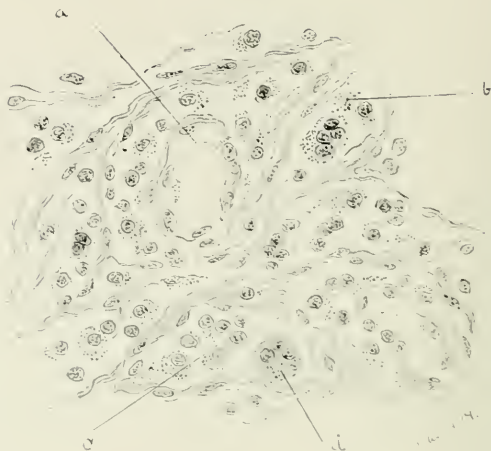


FIG. 6.—Semi-diagrammatic drawing showing (*a*) dilated capillaries, (*b*) fatty infiltration of the connective-tissue cells, (*c*) xanthoma-cells, and (*d*) xanthoma giant-cells.

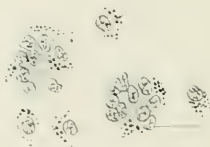


FIG. 7.—Semi-diagrammatic drawing of (*a*) xanthoma-cells and (*b*) xanthoma giant-cells.

TO ILLUSTRATE DR MACLEOD'S CASE OF XANTHOMA TUBEROSUM MULTIFLEX.

to near the subcutaneous tissue in the centre and tailing off along the sub-papillary layer at the sides, suggesting that it took its origin near the surface and spread downwards.

With a high power the detailed changes were as follows: The fibro-fatty mass was made up of a coarse network of fibrous tissue, in the irregular meshes of which were dilated capillaries and groups of cells of various types. Around the capillaries was a cellular proliferation, some of the cells of which seemed to grow from the actual adventitia of the capillary itself. These cells were large, oval or polygonal in shape, with a central round or oval nucleus, and an appearance suggesting an endothelial cell. They contained granules of fat and were the well-known "xanthoma cells." Here and there were larger cells evidently developed from them with a number of nuclei from two or three to a dozen or more, generally arranged in an irregular cluster or forming an imperfect ring at the periphery enclosing numerous fat-granules. These constituted the so-called "xanthoma giant-cells." Between these cells and especially marked at the periphery of the groups were ordinary connective-tissue fibroblasts, some round and others fusiform in shape, and exhibiting all the stages in the development of new fibrous tissue. In the tissue spaces between the collagenous bundles fatty granules were also present and irregularly distributed. In certain of the capillaries the endothelial cells had proliferated and also contained fat-granules. Here and there xanthoma cells could be detected from which the fat-granules had disappeared; these showed an unusually coarse network of spongioplasm and presented a vacuolated appearance. The pilosebaceous follicles were absent in the affected area. The centre of the mass was more densely fibrous than the periphery, while at the periphery the tissue was more cellular and the fatty granules more profuse (Figs. 6 and 7).

The overlying epidermis was flattened, the interpapillary processes shortened or completely obliterated, and fatty granules were here and there present in and between the cells of the basal layer and the deeper prickle-cells.

Pathogenesis.—The microscopical examination of the tissue led the writer to conclusions similar to those expressed by Pollitzer and Wilde in their admirable account of *Xanthoma tuberosum multiplex* (*Journal of Cutaneous Diseases*, 1912, xxx, p. 235). The initial

changes appeared to take place about the capillaries of the sub-papillary layer, and consisted of a dilation of the vessel, a proliferation of the endothelium, an infiltration of cells in the neighbourhood, and suggested the action of some irritant circulating in the blood. This irritant was evidently the fatty substance which seemed to be eliminated from the blood and infiltrated the endothelial cells, the cells around the blood-vessel and the tissue-spaces themselves, and causing the formation of the xanthoma cells. The irritative process did not stop, however, with the formation of the xanthoma cells, but led to fibromatosis and the gradual transformation of a soft cellular proliferation to a hard fibrous mass. The fatty substance is known to be a lipoid of the cholesterol group, and has been detected in the blood in diabetes in cases in which xanthomatous lesions were present in the skin. The reason why the disease is most liable to occur about the joints is that the capillary circulation is increased there owing to the movements.

Remarks.—The most striking features of the case were the extent of the cutaneous lesions, their association with changes about the joints, and the complete absence of general symptoms or derangements in the internal organs to in any way account for the marked changes in the skin and joints. In the case reported by Pollitzer and Wilde, which had certain features in common with the one above recorded, there was the same absence of derangements in the viscera, no sugar in the urine and no history of jaundice. In their case also hard nodules appeared on the backs of the hands over the metacarpophalangeal joints. In a considerable number of cases of xanthoma which have been reported, fibroid thickenings have been noted about the joints, but in none of the cases which I have been able to find in the literature is there any record of changes so extensive in degree as in the above case.

MULTIPLE IDIOPATHIC PIGMENT SARCOMA (SO-CALLED)
OF KAPOSÍ, WITH REPORT OF AN EARLY CASE.

BY J. H. SEQUEIRA, M.D., F.R.C.P., F.R.C.S.

DURING the past twelve years I have had the opportunity of studying somewhat closely four cases of this interesting disease, and the patient whose condition I now propose to describe marks an interesting stage in its development. For the description of the pathological changes seen in this and another case I am indebted to my colleague, Dr. H. M. Turnbull, Director of the Pathological Institute at the London Hospital.

Simon F—, a tailor, aged 46 years, was admitted to the London Hospital on August 12th, 1913. He was a rather stout man, of pale complexion, with dark hair turning grey, and looked much older than his years. He was of Hebrew extraction, and was born in Poland. He had lived in the East End of London for the past eight years. His wife enjoyed good health, and he had two healthy children.

Present illness.—Two years ago the patient noticed on the left foot, just above the ankle, a purplish swelling, which gradually spread all over the foot in the course of the next six months. Twelve months ago some spots appeared upon the right foot, and these gradually spread. During the past two months similar small swellings have appeared about the left wrist and hand. Two months before admission to the hospital the left foot became more swollen. The lesions upon the feet were painful, but those about the wrist itched slightly. The pain in the feet prevented the patient from standing for any length of time, and for several months during the past year he has been unable to do any regular work. There was no history of any other illness, and there has been no gout or joint trouble.

The condition of the skin: Left foot.—The dorsal surface over nearly the whole extent of the foot, and over the ankle as far as each side of the tendo Achillis, was of a purplish-red colour, and had a swollen appearance. Beginning behind the external malleolus and curving round this prominence to cross the front of the ankle in an almost straight line there was a raised purplish infiltrated

edge. Towards the inner side of the foot this edge was made up of small discrete papules about the size of a hemp- to a lentil-seed. In front of the inner malleolus was an irregular triangular area of normal skin, and a similar but rounded patch was present over the metatarsal region of the fourth and fifth toes. Towards the ankle the affected area was purplish, definitely raised and infiltrated, while at the side of the foot the colour was redder, fading gradually into the colour of the normal skin of the sole without a definite line of demarcation. All over the purplish area palpation gave the impression of infiltration, which at the root of the toes suggested a sclerodermatous condition. The infiltration was so dense that the patient was unable to move the toes readily. There was no tenderness, and the area did not pit on pressure. About two inches above the internal malleolus there was a discrete roughly square-shaped lesion, rather less than a sixpenny-piece, which was raised, flat, quite hard and of purple colour, the covering epidermis being immobile over the swelling.

Right foot.—Behind the internal malleolus were two lentil-sized purple papules. In front of the external malleolus there were three similar lesions, and scattered over the dorsal surface of the foot, especially in its outer half, there were several more of the same type. The whole of the dorsum of the foot had a rather dusky-red appearance, and on palpation gave the sensation of infiltration, but this was much less marked than on the left foot. There was neither tenderness nor œdema.

Left wrist and hand.—On the dorsal surface of the left hand and on the ulnar side of the front of the wrist there were several purple papules of similar character to those on the right foot. There was no infiltration about the lesions on the back of the hand and only a slight degree on the front of the wrist. The rest of the skin was free from the eruption.

General condition.—There was no evidence of disease in the thorax or abdomen. The knee-jerks were present, and there was a flexor response to the plantar reflex.

The pulse was 78 per minute, regular, small volume.

Blood-pressure 150 mm. by the Riva-Rocci instrument.

Urine: acid; straw colour; specific gravity 1016; no albumen; no sugar.

The Wassermann reaction was negative.

The patient was shown at the International Medical Congress and at the meeting of the Dermatological Section of the Royal Society of Medicine (October 16th, 1913).

The lesions are being treated by X-rays with some apparent improvement.

Two portions of the affected skin were removed for examination and the following report was kindly made by Dr. H. M. Turnbull :

(Specimen 1, removed August 12th, 1913.)

Macroscopic.—A piece of skin fixed in formalin 0·7 by 0·4 cm.

Epidermis and a narrow zone of dermis could be recognised.

Microscopic.—A small portion of epidermis and dermis. The epidermis is crenated, so that small papillary projections are formed. Its surface is covered by a layer of horn. The basal cells occasionally contain granules of melanin. There are some sweat-ducts in the section; granules of melanin are present in the peripheral epithelial cells of the walls of the proximal parts of the ducts.

In the papillary portion of the dermis the capillaries are conspicuous; the papillæ are cut tangentially and usually show cross sections of four or five small patent capillaries. Evenly distributed throughout the rest of the dermis are numerous cellular areas. These areas are in the normal position of the vessels of the dermis—for instance, round the sweat-ducts. They consist of groups of closely packed capillaries. The majority of the capillaries are merely small spaces lined by a layer of endothelium. A few have an outer row of similar cells which are separated from the endothelial lining by collagenous fibrils. The groups of capillaries lie in a scanty stroma of a delicate fibrillar tissue, which contrasts sharply with the stout fibres of the surrounding dermis. This stroma contains a very few spindle cells and a few free, rounded or polygonal cells. Many of these free cells lie in small spaces, and are evidently desquamated endothelial cells in capillaries. Others are not connected with capillaries; they are mononuclear cells with basophile protoplasm. A very few resemble lymphocytes; the majority resemble free endothelial cells. Elastic fibrils are present in the areas occupied by the capillaries. The capillaries throughout the section have a patent lumen, but are almost all empty. There are no plasma-cells (Unna-Pappenheim stain). There is no pigment in the dermis.

(Second specimen, removed August 23rd, 1913.)

Macroscopic.—Two pieces of skin measuring 0·8 by 0·4 cm. The epidermis is white and beneath it is a tissue 0·1 cm. thick.

Microscopic.—The appearances resemble those of the previous section. There are a few more spindle-cells and free cells in the stroma of the areas which are occupied by the capillaries. A few tissue mast-cells are present in the adjacent dermis.

Remarks by Dr. Turnbull.—The chief abnormality visible in the skin is an increase in the number of capillaries. This increase appears to be due to an actual proliferation, and not to be due merely to a congestion rendering the capillaries more conspicuous. This proliferation has taken place in the normal position of the vessels. Round and between the capillaries there is a slight proliferation of spindle fibroblasts and a slight infiltration by mononuclear basophile cells. The majority of these cells appear to be free endothelial cells, a few resemble lymphocytes. There are no leucocytes and no plasma-cells.

I have compared the sections with those of a small portion of skin which was sent to me by Dr. Sequeira three years ago as an example of Kaposi's multiple idiopathic pigmented sarcoma (Michael C—, aged 78 years, 1910). In this case there are in one portion of the dermis areas in which there are numerous engorged capillaries. The increase in the number of capillaries is less obvious, however, whilst the stroma in which they lie is abundant and more cellular. There are a few plasma-cells in the stroma, and several perivascular groups of plasma-cells are present in the adjacent portion of the dermis, which is free from the areas of capillary congestion. Elastic fibres are not present in the stroma between the engorged capillaries. Moreover, in the affected and unaffected dermis there is a great amount of intra- and extra-cellular pigment. This pigment gives the reaction of iron. In this case of Kaposi's so-called "sarcoma" there appears to be a chronic inflammation of the dermis, which is associated with engorgement and possibly proliferation of capillaries, and with the deposit of much pigment derived from hæmoglobin. In the case now reported there is an apparent proliferation of capillaries, less evidence of inflammation, and no deposit of pigment.

The presence and absence of pigment constitute the most striking difference between the two cases. The deposit of pigment, however, is doubtless merely a secondary phenomenon due to hæmorrhages

from engorged capillaries. Both cases may represent phases of a hæmangiomatous condition, which is of the nature of an inflammatory reaction rather than a true blastoma. In neither case is there evidence of sarcoma.

I append short notes of the three other cases I have shown, with references.

Christopher MacC—, marble mason, aged 65 years.*

The patient was a strong, healthy-looking man. He was born in Ireland, but had lived many years in the East End of London. Gout since 1893, and several characteristic attacks in foot and hand and in the olecranon bursa whilst under observation in the London Hospital. Skin affected five years. Purple congestion with induration, beginning in feet and extending to knee. The left hand also affected. Many nodules from pin's head to pea in size. On left hand oval vascular swelling the size of a mulberry, and another the size of a pea with a pedicle projecting through openings in the epidermis.

Dr. Bulloch reported a cellular mass under the thinned epidermis. The cells were ovoid or rounded. Between the cells a homogeneous substance. Vessels lined with epithelium which stained normally, apart from the vessel spaces not lined with epithelium.

The cellular infiltration "resembled in appearance and manner of growth endothelial cells." Where the cell growth was most dense the cells showed a tendency to form layers round each other such as are frequently met with in endotheliomata. The process appears to be most probably of the nature of chronic inflammation.

Michael, C—, aged 78 years, † a Polish Jew.

The patient had lived for twenty-five years in the East End of London. There was no history of gout.

Disease began on dorsum of right foot and lower part of right leg. Left side affected one year later. Purple swelling with rounded elevations as large as a six-penny-piece, and some small hæmorrhagic blebs. Purplish spots on right forearm and wrist.

Dr. Turnbull reported on the histology of the skin.

In this case there were numerous engorged capillaries and peri-vascular infiltration. There was an abundant cellular stroma and several peri-vascular groups of plasma-cells. A great amount of cellular and intercellular pigment which gave the reaction of iron. This patient improved under X-ray treatment, but has not been seen for the past two years.

J. S—, aged 84 years.‡

A strong, hale old man, born of German parents in Cardiff; a licensed

* *Brit. Journ. Derm.*, June, 1901, vol. xiii, p. 201 (with plate).

† *Ibid.*, October, 1910, vol. xii, p. 356.

‡ *Ibid.*, November, 1908, vol. xx, p. 376.

victualler by trade. Numerous attacks of gout. The affection began in the right foot and spread to the leg and lower part of the right thigh. Numerous purplish-red tumours from a small pea to a small nut. Some of the lesions on the foot were ulcerated. Left leg and foot affected, but to a less degree. Chronic interstitial nephritis and prostatic enlargement.

No microscopical examination was permitted.

The patient is reported to have died from renal disease.

In an interesting study of six cases Dalla Favera (*Archiv f. Derm. u. Syph.*, 1911, cix, p. 387) concluded that there is a new formation and dilatation of the blood-capillaries often in a very early stage of the tumour formation.

Dr. Turnbull's observations on the case now described point to the primary affection being an increase in the number of capillaries—an actual proliferation and not merely a congestion which renders the capillaries more conspicuous.

The cellular infiltration is peculiar, and consists of spindle fibroblasts and an infiltration of mononuclear basophile cells, most of which appear to be free endothelial cells. This resemblance in appearance and manner of development to endothelial cells is noted by Favera, and also by Bulloch in his commentary on the pathological appearances in my first case.

The absence of pigment in the sections of the present case and the presence of a pigment giving the iron reaction in the more advanced case confirm repeated observations that the pigment is derived from hæmorrhages from the engorged capillaries in the new growth.

Macleod, reporting on Weber and Daser's cases (*Brit. Journ. Derm.*, vol. xvii, No. 199), described the condition as a growth of organising connective tissue associated with marked vascular dilatation and œdema and deposit of blood-pigment.

We are still as far as ever from understanding the cause of this condition. Of my four cases, two have had actual gout whilst under observation and two have certainly had no gout. Hutchinson had two cases in which there was gout, and he mentioned it as occurring in others (*Archives of Surgery*, vol. v, p. 237, and vol. vi, p. 132).

Many of the Continental cases have been free from gout, which was also absent in Weber and Daser's case.

Of my three cases, which have been long under observation, there has been no reason to consider that the affection has been dangerous

to life, and the Galician Jew under Pringle and Mackenzie lived for many years after one leg had been amputated, and at his death from heart failure, secondary to bronchitis and emphysema, the cutaneous affection had disappeared. Three of Dalla Favera's patients died, one from tuberculosis, and two with metastatic growths in the viscera. He found the duration of the disease varied from two to twenty years, the average being from eight to ten years. Complete resolution of the tumours was observed in some cases.

ROYAL SOCIETY OF MEDICINE.

DERMATOLOGICAL SECTION.

MEETING held on Thursday, October 16th, 1913, Dr. J. J. PRINGLE, President of the Section, in the Chair.

PRESIDENTIAL ADDRESS BY DR. J. J. PRINGLE.

GENTLEMEN,—My first and most agreeable duty is to thank you from the bottom of my heart for the signal and very conspicuous honour you have done me in electing me your President for the ensuing session. Pleasant and grateful as this task will doubtless be, I am fully aware of its responsibilities, and I shall do my utmost to cope with them adequately, and to the honour and credit of the great, learned Society of which this Section is a component part. Should I be successful in conducting our meetings to happy issues and in the thoroughly scientific spirit attained by my great predecessors in this chair I shall regard myself, and you, as truly fortunate. The names of Radcliffe-Crocker, of Colcott Fox, of Malcolm Morris, are indeed names to conjure with and to light me on my path; but without the cordial co-operation of my Executive Council and of you, my constituents—so to speak—my labours must be imperfect or unavailing. On this cordial co-operation your kindness encourages me to reckon with confidence.

It must, I think, be obvious to all members of our Section that our methods of procedure in the exhibition and discussion of cases have not always been hitherto quite satisfactory or in entire accordance with the dignity of our Society. This has

undoubtedly been primarily and mainly the result of the healthy zeal and keenness of Fellows to examine cases minutely under conditions which do not lend themselves favourably to close investigations. Our ensuing discussions have undoubtedly been unduly desultory or conversational, and our published *Transactions* have necessarily mirrored our proceedings somewhat imperfectly and dimly. I have to-day brought before our Executive Council some suggestions for, at least, diminishing the spots upon our sun, and when these have been fully considered and ultimately formulated they will be duly communicated to the general body of Members of the Section.

In drawing up any regulations for the conduct of our business it is, I think, essential to bear in mind—(1) that the existing conditions are far different from those which obtained when our two original constituent societies were founded, and afterwards flourished exceedingly; and (2) that our meetings are in no sense intended to appeal to dermatological babes and sucklings, nor to instruct tyros in the dermatological alphabet. Equally little, as I hold, are they to be considered as media for self-advertisement or for the promulgation of mere dermatological tips. The sole objects of our Section, as I understand them, are the disinterested advancement and diffusion of accurate dermatological knowledge and the promotion of scientific dermatological research. And in this spirit I shall—relying upon your whole-hearted co-operation—preside over and guide our proceedings throughout the term of office during which you have entrusted me with presidential functions.

Dr. Pringle then proposed a vote of thanks to the retiring president, secretary and concillors, which vote was carried with acclamation.

Dr. J. L. BUNCH showed a case of *Keratosis follicularis spinulosa*.

The patient was a child, aged 2 years, on whose scalp and eyebrows no hair had at any time grown except a number of stumps, darkly pigmented, and $\frac{1}{4}$ in. long. Round each pilo-sebaceous orifice was well-marked keratosis, and to the touch the surfaces gave the sensation of a nutmeg-grater surmounted by very small bristles. No redness or hyperæmia was present, the disease gave rise to no apparent subjective sensations, and the child seemed to be otherwise in good health. Microscopically no fungus was present in the hairs. A younger

sister had a good crop of healthy hair. The name *Keratosis follicularis spinulosa* was given to the disease by Unna, and appeared preferable to the name *Keratosis pilaris*.

Dr. J. L. BUNCH also showed a case of *Xantho-erythrodermia perstans*. The patient was a man, aged 28 years, who had for some years suffered from pinkish-yellow, slightly scaly, slightly infiltrated patches on both legs and thighs. The patches first commenced on the right leg below the knee, later on the left leg, and had gradually spread until there were a number of similar patches on both legs and thighs. The patches varied in size from 1 in. by $\frac{1}{2}$ in. to the size of the palm of a hand, were irregular in outline, but in most cases sharply defined. By daylight the yellowish tint was very appreciable and predominated over the pinkish tinge which showed by artificial light. There was very little itching, and no other subjective symptoms. The patient was apparently healthy, and there was no family history of any similar disease.

The case had previously been under treatment elsewhere, and the right leg had had three exposures to X rays without any appreciable benefit, and other local treatment did not seem to have caused any improvement in the lesions. This, of course, corresponded with the results obtained in similar cases, which were notoriously resistant to treatment.

Sections showed scarcely any infiltration of the derma, but infiltration of the epidermis, flattening of the papillæ, and almost complete absence of the stratum granulosum.

The first similar case was reported by Unna under the name of *Parakeratosis variegata*, and here only the papillary layer and epidermis were affected. Brocq's *Erythrodermie pityriasique en plaques disséminées* appears to be a name for the same disease, and his cases are presumably the same as the one now recorded under the name which Radcliffe-Crocker gave to the disease.

Dr. CORBETT said the case was shown at the Congress by Dr. Stainer and himself. Various diagnoses were made, one of which was the para-psoriasis of Brocq, another was *Parakeratosis variegata*, and another was early mycosis. One leg had since been X-rayed three times, but without benefit. An excised piece of skin showed only chronic inflammation.

Dr. PERNET considered this was a case of what he had named *pro tem*. *Xantho-*

erythrodermia perstans. He would like to know if the histology corresponded with what he (Dr. Pernet*) had described.

The PRESIDENT concurred fully in Dr. Bunch's diagnosis, but, unfortunately, the name did not carry one far. Perhaps investigation of this case would give more information about the condition than exists at present.

Dr. HALDIN DAVIS showed a case of *Mycosis fungoides*. The case was that of a patient who had been shown previously at the meeting of the Section held on April 17th, 1913, at which the exhibitor had suggested the same diagnosis. At that meeting the case had given rise to considerable discussion, and alternative diagnoses had been put forward by other members. The patient, a woman, aged 56 years, who had suffered from a universal scaly dermatitis for about three years, was now shown again in order that the Section might have an opportunity of noticing the changes which had occurred in the last six months. The most noticeable alterations were (1) that the infiltration which had affected the left side of the face had almost disappeared; in fact a few weeks before the meeting the face was quite clear, but it had now again become somewhat infiltrated on the side of the nose near the inner canthus; (2) that on the scalp, which had on the former occasion been almost totally bald, a considerable quantity of fresh, fine white hair had grown; (3) that the dermatitis itself had diminished considerably, although undoubtedly still present. Since the first time the case had been shown the exhibitor had had the blood examined both for the Wassermann reaction and for abnormality in the blood-cells. In both points the result of the examination was negative. The only treatment which the patient had had was 5 minims of liq. arsenicalis three times a day and the external application of liquid paraffin. She had had neither photo-therapy, radiotherapy, nor even vaccines. Nevertheless the exhibitor still held to his previous diagnosis.

Dr. PERNET said that when Dr. Davis showed the patient before, he regarded it as the pre-mycotic stage of *Mycosis fungoides*, and that was still his view.

The PRESIDENT said he had observed one case of what proved ultimately and indubitably to be *Mycosis fungoides*, which cleared up completely for some time under massive doses of arsenic, but subsequently recurred and proved fatal. He had never seen a pre-mycotic eruption exactly identical with that presented by the patient exhibited; it certainly lacked the objective characters of the cases seen in abundance at the St. Louis Hospital, and there classified as "*hommes ou femmes rouges*." He dared not venture upon a diagnosis.

* *Brit. Journ. Derm.*, 1905, xvii, p. 134.

Dr. S. E. DORE showed a case of *Granuloma annulare*. The patient, a gentleman, aged 55 years, had complained of the lesions now to be seen on the hands for two years. The history indicated that the lesions began as raised papules or discs and then spread centrifugally, the centre undergoing involution. The oldest lesion, of a duration of two years, was now involuting at the edge. Another patch was bisected by the scar of a leopard bite, which he had received in Ceylon, where he had lived for many years. He also presented so-called "tropical skin," *i.e.* atrophy and pigmentation of the back of the hands. The exhibitor invited suggestions as to treatment, particularly as to the application of X-rays.

Dr. PERNET said that X-rays acted favourably in these cases, generally clearing up the condition.

Dr. GRAY said he had a patient with *Granuloma annulare* on both hands. On one hand a biopsy was done, and the hand tied up, when, as not infrequently happens, the lesions cleared up. The two patches on the other hand received pastille doses of X-rays, which caused them to disappear. On removing the bandage from the first hand the condition recurred, but the hand treated with the rays remained cured. The case was shown at the International Congress of Medicine.

Dr. WHITFIELD agreed that the slight hyperkeratosis of tropical skin disappeared on the application of X-rays, and did not return. He agreed tentatively with the diagnosis in this case, but the fact that the patient came from Ceylon led him to suggest examination by means of abrasions and by staining films; there were other diseases affecting people in Ceylon.

Dr. DORE, in reply, said that he would use X-rays, and if opportunity presented, he would carry out Dr. Whitfield's suggestion. Some of the lesions got well spontaneously, but one relapsed.

Dr. E. G. GRAHAM LITTLE showed a case of *Raynaud's disease with onychia*. The patient was a young lady, aged 29 years, a sister in a convent in London. The Raynaud phenomena were typical, and included the alternate blanching and reddening of the extremities with subjective sensation of tingling and numbness; these sensations recur two or three times a week. When first seen the nails were peculiar; the free edge for a distance of about one third the length of the nail was bluish in colour, with increased convexity and raised off the nail-bed, from which it was separated by $\frac{1}{8}$ in. or more. This part of the nail was not especially thickened or brittle. Unfortunately the patient, disliking the disfigurement caused by the discoloration, had cut the excessively convex free end down to the middle third,

where the nail was grossly thickened, but not discoloured. The photograph taken before the pairing of the nails, which altered their aspect materially, shows this discoloration especially well in the left thumb. The same changes were present in all the nails of both fingers and toes, and had persisted for about eighteen months.

Scrapings had been taken on two occasions from several of the nails of both fingers and toes, especially from the thickened middle third of the nail, and submitted to prolonged and careful microscopic examination with a uniformly negative result. In the exhibitor's opinion *Tinea unguium* could therefore be excluded. There were no other symptoms of psoriasis, so that the latter diagnosis could not be positively affirmed.

The PRESIDENT (Dr. J. J. PRINGLE) said that although "Raynaud's phenomena" were undoubtedly present in the case exhibited, the general condition of the nails and finger tips was not that of "sclerodactylia," which so frequently obtains in Raynaud's disease. He asked whether scrapings had been microscopically examined with the view of excluding ringworm, which was strongly suggested by the heaping up of the nail-matrix, pushing back the nail substance. He had recently seen an adult with a precisely similar condition of all the finger-nails, apparently of ten years' duration, in which ringworm fungus was easily found.

Dr. F. PARKES WEBER did not consider it likely that the condition of the nails had anything to do with Raynaud's phenomena. He had never heard of any exactly similar thickening of the nails having been associated with Raynaud's disease.

Dr. GRAHAM LITTLE replied that he made a scraping from one of the nails, but it did not look to him like ringworm. The patient had now cut off the disfiguring part of the nail, which was a disadvantage for demonstration purposes.

Dr. E. G. GRAHAM LITTLE also showed a case of *Acne varioliformis*. The patient was a woman, aged 47 years, who had had this disease for the past two years. There were closely grouped, shallow pitted scars characteristic of this eruption on the forehead, at the junction of the hair and skin, on the temples, at the angles of the nose, and over an area the size of the palm of the hand on the intermammary portion of the chest. There were also some fresh small follicular ulcers in these areas, as well as the older scars. The scalp was very scurfy, but there were no lesions of the disease in that situation. The patient was unmarried, had had no children, and gave a negative Wassermann reaction. She had not had *Acne vulgaris*, and the disease had commenced at an age at which *Acne vulgaris* could be put



TO ILLUSTRATE DR. LITTLE'S CASE OF RAYNAUD'S DISEASE WITH ONYCHIA.

The

out of court. The case was unusual in its severity and in the sex of the patient.

The PRESIDENT regarded the case as of great interest. As far as he knew it was not generally recognised that *Aene varioliformis* could be so acute and widespread. He had had under observation two cases in which the whole scalp, the whole of the face, and a large portion of the neck and upper part of the chest were involved in an intensely acute, impetiginous pustular eruption, the nature of which, in the first instance, he was unable to determine. He was only able to make a firm diagnosis after the acute phenomena subsided. The condition in both instances continued to relapse, but in a minor degree, during many years, independent of and almost uninfluenced by treatment. He asked whether members had had experience of treating this disease by means of *staphylococcus vaccines*; his own results from them, not only in the two cases referred to, but in a considerable number of others, had been negative; but he remembered a paper by a well-accredited American dermatologist, Dr. Engman, of St. Louis, claiming uniformly brilliant results from the use of *staphylococcus vaccines* in *Aene varioliformis*. Dr. Engman's paper* led one to believe that the disease was much more common in America than in this country.

Dr. BUNCH said he had X-rayed two cases of the disease, doing one side at a time, with a full pastille dose. Later he X-rayed the other side also, and the treatment was in each case followed by a disappearance of the lesions.

Dr. GRAHAM LITTLE replied that he had not tried a vaccine for the condition. It was rare in his experience; he had never before seen it in a woman, and in his ten years at St. Mary's Hospital he had not seen more than half-a-dozen instances of the disease.

Dr. E. G. GRAHAM LITTLE also showed a case of *chronic hypertrophy of the lips*. The patient was a young man, aged about 28 years, who had suffered from swollen lips for about three years. Both lips were greatly enlarged, covered with hyperæmic mucous membrane, without noticeable fissures or increased glandular secretion. The degree of swelling varied within certain limits, increasing and decreasing from time to time, but never receding to normal limits of size. Owing to the persistent swelling the lips were everted, shiny, and rather dry than moist. There was no nasal discharge, but there were numerous carious teeth, especially in the front of the mouth. The gums were not swollen or tender. Wassermann's reaction was negative.

Dr. J. M. H. MACLEOD showed a case for diagnosis. This was a case in which lesions of the type of *vesicating urticaria* were present on the face, arms and hands of a young girl. The object of showing the case was to elicit the opinions of the members as to the category in

* *Journ. of Cut. Dis.*, 1910. xxviii, p. 563.

which such cases should be placed. The patient was a healthy-looking girl, aged 12 years. Her family history revealed no hereditary disease or weakness, and her parents were alive. She had enjoyed excellent health, except for attacks of measles and whooping-cough. Her present cutaneous affection had begun five weeks ago, about a fortnight after coming to London from North Wales. The onset of the eruption was not associated with any general symptoms or any digestive disturbance. At that time, towards the end of August, the weather in London was very hot, and she thought the heat and thirst from which she suffered might have something to do with the causation of the eruption.

The eruption appeared simultaneously on the face, neck, back of the forearms, and hands. The lesions were exactly of the same type as those of vesicular urticaria. They appeared first as a small red blotch about the size of the finger-nail with a central, slightly raised, rounded papule, which rapidly developed into a vesicle about the size of a split-pea with clear or occasionally hæmorrhagic contents. In about twenty-four hours the vesicle broke and the lesion gradually involuted, leaving a purplish slightly pigmented patch from $\frac{1}{4}$ to $\frac{1}{2}$ in. in diameter, with an indefinite outline, but no pitting such as occurs in *Hydroa vacciniforme*. In addition to the above situations a few lesions were present on the flexor aspect of the arms and on the palms of the hands. Lesions also occurred on the lips and inside the *alæ nasi*. Since that time lesions had been constantly coming out, a few every day. Recently they had been smaller in size and involuted more rapidly. The lesions were not preceded or accompanied by itching, and there was no factitious urticaria.

A physical examination failed to reveal any marked abnormality; the urine was normal; the blood showed slight eosinophilia (5 per cent.).

The patient was put on a careful *régime* with regard to diet and an intestinal antiseptic treatment with distinct benefit.

The precise category in which the case should be placed was difficult to decide. It seemed from its distribution to be most probably a variant of the *Erythema multiforme* group and due to some form of auto-intoxication. There was no grouping of the lesions to suggest *Dermatitis herpetiformis*, nor was the itching sufficient.

The absence of cicatrices and the existence of lesions in covered places like the forearms argued against *Hydroa vacciniforme*.

The PRESIDENT expressed his obligation to Dr. MacLeod for bringing the case forward as he regarded it of considerable practical importance, all dermatologists having doubtless met with precisely identical cases, especially in private practice. He sympathised with the exhibitor in his dilemma as to nomenclature. He entered them in his personal case-books as "vesicating urticaria," although many did not itch. He associated them, as Dr. MacLeod did, with intestinal toxæmia; and more than once he had seen benefit follow treatment on the same lines as for cases of "colitis." Many of these patients exhibited factitious urticaria in a remarkable degree. Still he was quite dissatisfied with his own name for them, which he only used as a label.

Dr. PERNET regarded this kind of case as one which could not always be definitely pigeon-holed; it was on the borderline of a variety of conditions which Dr. MacLeod had mentioned. One should fall back on Dr. Brocq's fascinating diagrams, and place these cases somewhere between the circles.

Dr. ALFRED EDDOWES said he had seen many cases of *Urticaria papulosa* become complicated by infection; and in these cases he had learned to look for streptococci and *Staphylococcus albus*. The last-named was very lively in hot weather, and a child in the country would not have the same chance of contracting the affection as on coming into a crowded city. He had seen almost an epidemic of impetigo in children resident in London mews.

Dr. MACLEOD replied that he did not think that Dr. Eddowes' suggestion was tenable, as the lesions, in their appearance and evolution, were like those of vesicating urticaria and not impetigo, and they were not infective.

Dr. G. PERNET showed a *severe secondary syphilitic rash in a woman aged 70 years*. When seen the patient was suffering from a very florid secondary rash, with much rawness and fissuring at the angles of the mouth. As she had not made any progress on mist. hydrarg. binodi, ordered by one of his clinical assistants, he put her on hydrarg. cum creta until a bed was ready for her to try neo-salvarsan in small doses. She had improved very rapidly on this, though Dr. Pernet did not place great reliance on hydrarg. cum creta.

Dr. G. PERNET also showed a case of *permanent alopecia following X-ray treatment for Tinea tonsurans*. The patient was a little girl who had been X-rayed elsewhere two years previously. As there were a few small crusted lesions, Dr. Pernet ordered ung. hydrarg. ammon. dil., and the mother was sure some of the hairs had grown since. A few straggly hairs were now to be seen.

Dr. G. PERNET showed a case of *secondary syphilitic patchy alopecia*. The patient, a young woman, aged 25 years, came to the West London Hospital for alopecia areas. They were irregular and com-

pletely denuded. Dr. Pernet diagnosed the case as syphilis, and on investigating found adenitis, a roseola, etc. She had had an injection of neo-salvarsan (intravenous) followed by grey oil, and was greatly improved in her general health.

Dr. PERNET showed a case of *generalised diffuse nevus*. The patient was an undersized boy, aged 9 years, with a diffuse nevus involving the greater part of the body, especially the left side.

Dr. J. H. SEQUEIRA showed a case of *leprosy*. The patient, a healthy-looking married woman, aged 52 years, was born in Odessa, and had lived there until eight years ago, when she came to London with her family. Four years ago she noticed a red itching spot on the cheek. In the course of two years the eruption spread over the body. The left leg was first affected two years ago. Fresh lesions have made their appearance from time to time and others have faded. The patient was unable to give a connected account of her illness, but apparently the eruption itched and some of the areas have been painful. The whole of the trunk was affected. The eruption consisted of erythematous patches, varying in size from a half-crown to the palm of the hand. In some there was slight but definite infiltration, and on the back there were several irregular rounded infiltrated plaques of deep brown colour, with central depressed white areas of irregular or festooned outline. The left leg was similarly affected, but at the junction of the middle and lower third of the shin there were two brown, raised, smooth, elongated keloid-like tumours, the larger being $1\frac{1}{4}$ in. in length and $\frac{1}{2}$ in. in width. Near these elevations were several small, round, less infiltrated lesions which appeared to be an early stage of the keloid-like lesions. The depressed atrophic areas on the back were anæsthetic, and there were extensive areas of anæsthesia on the left leg. The ulnar nerve could be felt but did not appear greatly thickened. The Wassermann reaction was negative. The blood examination gave the following differential count: Polynuclear neutrophils, 57.5 per cent.; polynuclear eosinophiles, 2.0 per cent.; large lymphocytes, 22.5 per cent.; small lymphocytes, 10.0 per cent.; large hyaline cells, 8.0 per cent. There was no nasal discharge.

A small infiltrated nodule of recent development was excised and sent to Dr. Panton for examination. He reported that the histology

of the lesion was that of a chronic infective granuloma. The cellular infiltration consisted of lymphoid, endothelial and plasma-cells. There were also giant-cells of small type with central nuclei. There were no areas of caseation. Acid-fast bacilli were extremely numerous, many of them being packed in the giant-cells in the manner typical of a nodule of leprosy.

Dr. PERNET said Dr. Radcliffe-Crocker had a case of leprosy in the old days when first the tuberculin of Koch was introduced, and he injected the patient with that, with the result that an attack of leprous fever was excited and a copious outbreak of fresh leprous nodules ensued.*

Dr. SEQUEIRA, in reply, considered it a mistake to say that all cases of leprosy showed a positive Wassermann reaction. In three cases of the disease, including this one, the Wassermann reaction, done by Dr. Fildes and Dr. McIntosh at the London Hospital, was negative.

Dr. J. H. SEQUEIRA also showed a case of *multiple idiopathic pigment sarcoma (so-called) of Kaposi*, which is described in detail at page 351.

The PRESIDENT expressed his great interest in the case, as he had observed two similar ones, to one of which Dr. Sequeira had referred in which life was threatened for years, but ultimately many of the masses underwent spontaneous involution. The muscles of the hands were greatly atrophied, presumably by pressure, and there was resulting clawing of the fingers like that of nerve leprosy. He would be interested to hear Dr. Sequeira's opinion as to the precise nature and pathological affinities of the disease. He could not help thinking that it was allied to Granuloma fungoides. It was universally agreed that the condition should not be called sarcoma. Had the exhibitor seen anything to justify the "gouty" causation of the condition which had been invoked by the late Sir Jonathan Hutchinson?

Dr. MACLEOD said that he had examined sections from a similar case and had found that histologically the growth was not a sarcoma, but consisted of organising connective-tissue cells associated with marked vascular dilatation and the disposition of blood-pigment. In its histology it somewhat suggested Mycosis fungoides, but the tissue was not so broken up.

Dr. F. PARKES WEBER thought that in this disease a distinction in regard to microscopic appearances should be drawn between two types of lesions; there were, firstly, blue nodules well under the skin, and there were, secondly, the later and more projecting, more granular and moist or discharging lesions. Some of the latter became pendulous, and were, of course, particularly easily removed. In some cases a biopsy of an early lesion, a blue nodule, had been made, but probably more often one of the little projecting or pendulous growths had been removed for microscopical examination.

Dr. SEQUEIRA replied that he had shown two patients suffering from gout who

* Radcliffe-Crocker, *Diseases of the Skin*, 3rd ed., p. 862.

had this condition, one of whom was the sole patient seen in this country who was not a foreign Jew. He had many attacks of gout while under his care. The second case of the kind he had seen with gout was that of an elderly man who was born at Cardiff, of German parents. In three other cases there was no gout.

Dr. W. KNOWSLEY SIBLEY showed a case of *Nævus linearis bilateralis*. A youth, aged 16 years, of the average intellectual standard, states that the condition commenced on the front of both knees when he was aged 3 months, and shortly afterwards on the sides of the neck. There is no obvious lesion on the knees now. The condition in many places, such as sides of the neck, arms and forearms, is more or less symmetrical, and is of varying degrees, from a simple pigmentation of the skin in some places, to raised, pigmented, warty nævoid conditions in other parts, tending to a band formation down the ulnar surface of the left forearm and the interdigital spaces of the ring and little fingers of this hand, extending to the palmar surface, the right hand being free from lesions. The whole scalp area is deeply pigmented a dirty-brown colour, much the same shade as that of the hair, which is somewhat thin and scanty. Considerable pigmentation and slightly raised, more or less isolated nævi are present in abundance over the face. The oral mucous membrane is extensively affected, and the whole surface of the tongue. Markedly warty nævi are present in the right nostril and to a lesser extent in the left. Raised, deeply pigmented bands extend more or less all round the neck. On the front of the chest a large area of reddish nævi are present over the left pectoral region, extending slightly across the median line. On the abdomen a typical linear nævus is present on the left side, being strictly limited to the median line. Over the back there are irregular patches of pigmentation with very slight nævoid condition in places. Small lesions are present about the anal region. The lower limbs are not visibly affected, and the nails are normal.

A section of a piece of the nævus taken from the neck revealed the following characters: (1) The stratum corneum was thickened; (2) the stratum granulosum was well defined; (3) the stratum mucosum showed a proliferation and pigmentation of the cells; (4) the basal layer showed marked pigmentation; (5) the interpapillary blood-vessels were dilated and surrounded with cells; (6) cell infiltration was present in the upper part of the dermis. Mast-cells could not be detected.

A section taken from the pigmented area of the left forearm appeared to be an early stage of the same pathological condition, in which there was a marked pigmentation of the basal layer and of the cells above this, together with some pigmentation of the cells in the upper part of the dermis.

The PRESIDENT suggested that it was unnecessary to attach the epithet "bilateralis" to the nomenclature of the case, as such extensive mixed naevi were generally bilateral; while the adjective "linearis" was only partially true. The case was an extremely interesting one, and the very marked implication of mucous membranes was quite an exceptional and important feature of it, although not unprecedented.

Dr. STOWERS remarked that the involvement of the mouth and nose in this patient was of special interest. In the very remarkable case which he exhibited in 1908* of a young girl who had been the subject of the disease for upwards of nine years, and in whom the outstanding lesions upon the skin were of such unusual character and development that involvement of the mucous membranes might have been anticipated, they were entirely free.

Dr. SEQUEIRA said that recently he showed to the Section a child with a linear naevus in the neck, in whom the soft palate was involved. Some years ago he had an extensive case similar to Dr. Sibley's, in which the special point of interest was that, although the age of the patient was only twenty-eight, he developed epitheliomata on some of the lesions.

Dr. DORE (for Dr. WINKELRIED WILLIAMS) showed a case of *linear atrophy* in a young man.

MODIFICATION IN PROCEDURE FOR FUTURE MEETINGS OF THE DERMATOLOGICAL SECTION.

(1) Patients shall be instructed to attend at the Society's House, 1, Wimpole Street, at 4.30 p.m., in order that an opportunity may be given for their thorough examination previous to the formal meeting at 5 o'clock, and to enable members to become familiar with the principal facts regarding them.

(2) Exhibitors shall furnish brief notes of their cases on cards provided for the purpose, and shall attend in the side room to demonstrate their cases previous to the meeting. Intending exhibitors will receive cards on application to the Secretaries.

(3) It is extremely desirable that exhibitors who have had ample opportunity of studying the cases they show shall bring full notes of

* *Brit. Journ. Derm.*, 1908, xx (with illustrations).

them to the meeting in a form suitable for publication, and that these notes shall be given to the Junior Secretary at the meeting.

(4) Cases which have not presented opportunities for careful study shall be as welcome as hitherto, but if not notified to the Senior Secretary in time for publication on the agenda, their consideration shall be deferred until after the exhibition of those which have been duly notified.

THE LATE DR. LOUIS WICKHAM, M.V.O.

OUR readers will have learned with sincere regret of the death of Dr. Louis Wickham, whose labours in connection with the therapeutic use of radium have been of such great value to practising dermatologists. Dr. Wickham turned his attention early to the study of diseases of the skin, and was interne under Vidal and Fournier. He was chef-de-clinique under the latter master, and the experience thus gained led to his appointment as physician to the St. Lazare, a post which he held until failing health demanded his removal from Paris. Dr. Wickham was also librarian at the St. Louis Hospital. In 1905 he directed his attention to radium-therapy, and in collaboration with Dr. Degrais brought out an admirable text-book on the subject, a work which has been translated into several languages and is recognised as authoritative. Some time back Dr. Wickham received the Membership of the Victorian Order at the hands of the King, and quite recently he was admitted to the Legion of Honour. Dr. Wickham's many admirable qualities endeared him to a large number of friends in this country, where his advice was often in request in connection with his special branch of practice.

CURRENT LITERATURE.

THE ROSS INCLUSION-BODIES IN SYPHILIS. RESCHAD. (*Archiv f. Derm. u. Syph.*, vol. cxviii, No. 1.)

THE writer was unable to find these bodies in ten normal control patients.

His findings were negative in 36 per cent. of syphilitics in whom spirochaetes were found. These cases included (a) 6 cases of chancre—4 positive, 2 negative; (b) 14 of the secondary stage (in which the papular secretion was examined)—9 positive, 5 negative; (c) 4 cases of hereditary lues—3 positive, 1 negative; and (d) 1 case of gumma, negative.

Of very great importance is the fact that he found the cell inclusions in the blood of patients with acute leukaemia, Ulcus molle, pemphigus, Dermatitis herpetiformis of Dühring, Erythema multiforme and scarlet fever, in whom syphilis could be definitely excluded. On this basis he argues that the cell inclusions are a morphological expression of a specific cell reaction, and are not sexual or latent varieties of the spirochæte. A further argument in favour of this theory is the fact that the cell inclusions do not disappear during anti-luetic treatment.

The coloured plate that accompanies the monograph is well worthy of study. This work was undertaken at the instigation of Oberarzt Dr. Arning in the St. Georg, General Hospital, Dermatological Department, at Hamburg.

H. C. S.

THE THERAPEUTIC INDICATIONS FOR THE INJECTION OF NORMAL SERUM. ULLMANN. (*Archiv f. Derm. u. Syph.*, vol. cxviii, No. 1.)

THE first clinical experiments in this direction appear to have been carried out by Freund, who followed Bruck's intravenous saline injections in cases of eclampsia with injections of serum of normally pregnant women. He found that this serum was not specific, and that its place could be taken by the normal serum of non-pregnant women, men and animals. Its effect in certain toxic dermatoses, as, *e.g.*, Herpes gestationis, appear to have been excellent. Mayer and Linser report success with the sera of gravid women only, *i.e.* they claim specificity of action.

The latter has tried injections of normal serum in cases of the urticaria of pregnancy, prurigo, strophulus, and Pruritus senilis. In eighteen cases of common urticaria he produced a cure in fifteen after only two or three injections. This appears to have been a lasting result, and in twelve cases of prurigo the same influence is reported. Pemphigus also yielded in two cases out of six, though this result is not supported by Heuck, who can claim no more than an improvement in this type of case, and in one or two cases a distinctly converse effect. Psoriasis and the eczema of adults remained completely unaffected. The author then passes to his own results, which include—

(1) *Eczema of children*—two cases; *uninfluenced*; afterwards cured very easily by local therapy.

(2) *Dermatitis herpetiformis*—six cases; temporary amelioration of itching in the course of the injections in one case, which cannot be fairly ascribed to the treatment.

(3) *Pemphigus vulgaris*—one case; no improvement.

(4) *Urticaria*—three cases; no effect in two. In the third there was no recurrence of the eruption for four days, and patient was discharged improved, but six days later he reported a fresh and aggravated attack on the face and arms. The same failure to procure a lasting effect is reported with pruritus (four cases).

The author is careful to add that in no case injected were there any undesirable sequelæ, and in spite of his unsatisfactory results is of opinion that the method deserves further trial, especially in cases in which all local treatment has proved futile. The idea that the rationale of the treatment depends on the

presence in the serum injected of complement, because stale serum is ineffective, has had to be abandoned, for this author has titrated the amount of complement present in all the cases injected, and found it to be normal in every case. The various patients injected could not, therefore, owe their diseases to deficiency of complement.

H. C. S.

TWO CASES OF MULTIPLE SMALL-SPOT SCLERODERMIA CIRCUMSCRIPTA (? WHITE-SPOT DISEASE). KRETZMER.
(*Archiv f. Derm. u. Syph.*, vol. cxviii, No. 1.)

In a detailed clinical and histological investigation of two cases the author discusses the justification for the term "white-spot disease" of English and American authors for a class of symptoms which he believes to include a wide range of different underlying pathological states. The two cases examined closely resembled the pasteboard-like scleroderma described by Unna, whilst at the same time conforming to the descriptions usually applied to white-spot disease. He, therefore, maintains that the latter term should be used with the greatest reserve and caution, and suggests that *morphea* or *Scleroderma guttata, punctata* or *maculosa* would be more applicable and less misleading in the nomenclature and classification.

H. C. S.

THE CARBONIC ACID SNOW TREATMENT OF SKIN-DISEASES.
HASLUND (Copenhagen). (*Archiv f. Derm. u. Syph.*, vol. cxviii, No 1.)

In view of the fact that most of the literature on this subject is English or American, it is interesting to study the recorded results of so well-known a writer as the author of this publication. In two years' experience he has treated 179 cases, of which 84 were *Lupus erythematosus*, 7 *rosacea*, 55 various kinds of *navi*, 14 *verrucae*, 8 *carcinomata*, and 10 others of various skin-lesions.

Of the 84 cases of *Lupus erythematosus* treated, 10 were cured outright, 21 almost cured, 10 result unknown, and in all the other cases marked improvement resulted. Twelve seconds under fairly firm pressure was the average time of application, though places like the *concha auris* and the lips were subjected to less.

His results with the papular types of *rosacea* on nose and chin were excellent. He is careful to warn against anything but minimal pressure—average time 6 to 7 secs., and maximum 10 secs.—and he is glad to be able to agree with Malcolm Morris and Cranston Low on the utility of the procedure.

His 55 *navi* showed variable results, especially the flat vascular types. On the whole he is inclined to think that *navi* do not yield to CO₂ snow so well as to other methods of treatment. He prefers light or radium treatment for the common port-wine stains, and the galvano-cautery for the stellate type. The cavernous angioma, on the other hand, yielded excellent cosmetic results (six cases) in 15 to 20 secs. sittings. The verrucose types are favourably influenced.

Common warts are an absolute indication for CO₂, but the juvenile type are often too numerous. Such are best treated with a single X-ray application.

In the treatment of small *epitheliomata* Haslund has seen no reason for giving up either radium or X-rays, and in none of his eight cases did he use CO₂ exclusively.

In certain pre-cancerous conditions, such as hyperkeratotic infiltrations or pedunculated verrucose tumours, the snow was used with complete success, and senile warts yielded at once to single applications.

The author appears to be greatly in favour of short exposures. The longest mentioned in the article is one minute—for the common wart, but he lays considerable stress on adapting the pressure to suit the particular condition present.

With *Lupus vulgaris* the results are not at all encouraging, and it is only in the hypertrophic verrucose types that he recommends it. Similar results were obtained in psoriasis, and relapses were just as common with this method as with any other.

H. C. S.

PEMPHIGUS NEONATORUM: ITS RELATIONS TO THE DERMATITIS EXFOLIATIVA NEONATORUM OF RITTER, AND IMPETIGO CONTAGIOSA STAPHYLOGENES. HOFFMANN. (*Archiv. f. Derm. u. Syph.*, vol. cxviii, No. 1.)

SUMMARISING the bacteriological study of an instructive case in Jadassohn's clinic, the author states:

(1) Pemphigus of the newborn is apparently caused by a pure staphylococcic infection.

(2) The particular case discussed stood in absolute relation to a clinically and bacteriological typical infection of the mother, at the angle of the mouth, which, in virtue of the very thin crusts, healing with brown discoloration, and atypical localisation, was essentially to be diagnosed from the typical streptococcic infection.

(3) Even in older children we meet with pure staphylococcic bullæ in combination with pustular staphylogenic pyodermites.

(4) This case, originally from the clinical standpoint a case of Ritter's *Dermatitis exfoliativa neonatorum*, gradually passed into one of a pemphigoid type, which is very strong evidence of an identical aetiology.

(5) It has yet to be proved if, as in our case, a staphylococccæmia determines a malignant course.

H. C. S.

AUTO-HEMATOTHERAPY IN CERTAIN DERMATOSES. P. RAVAUT. (*Ann. de Derm. et de Syph.*, May, 1913, vol. iv, No. 5.)

RAVAUT has further modified the methods of Spiethof and of Praetorius by the simple procedure of withdrawing 20 c.cm. of the patient's blood and injecting it into the muscles of the buttock. He records the results of this treatment in thirty cases of skin-disease, including *Dermatitis herpetiformis*, eczema, psoriasis and acne. The symptom of pruritus is often influenced on the following day, and completely disappeared in three cases of eczema. It was also successful in the itching of *Dermatitis herpetiformis*. The dose of 20 c.cm. was usually repeated in four days, and a third injection given, if necessary, on the seventh day. As many as five injections were given in two weeks in a case of *Eczema rubrum* with marked improvement.

H. G. A.

CORRESPONDENCE.

To the Editor of the BRITISH JOURNAL OF DERMATOLOGY.

SIR.—Since the introduction of salvarsan three and a half years have passed. In the meantime a large number of deaths (about 200) and of cases of blindness, deafness, encephalitis hæmorrhagica, paralysis, epileptiform convulsions, and grave poisoning after the employment of salvarsan have been recorded in medical literature. As, in club and private practice, either through fear of publicity or because many colleagues by reason of principle do not publicly record cases, or upon other grounds, many deaths and accidents are not published, I therefore beg my colleagues to inform me of all cases of death, blindness, convulsions, paralysis, etc., and generally all grave and dangerous incidents occurring after the use of salvarsan, and to add a brief history of the illness, in order that collective statistics may be compiled. For facilitating the sifting of the material received the name of the respective practitioner and place of residence should be given. It is absolutely necessary to collect the unreported cases in order to add them to those cases already reported in literature, and thus be able to form an opinion as to the harmfulness or harmlessness of salvarsan.

I am, Sir, yours faithfully,

POTSDAMERSTRASSE 31A, BERLIN;

Dr. Med. DREUW.

October 21st, 1913.

BOOKS RECEIVED.

Diseases of the Skin. By DAVID WALSH, M.D. BAILLIÈRE, TINDALL & COX. Demy 8vo. Pp. xvi + 300, 29 illustrations. 6s. net.

Beiträge zur experimentellen Pathologie und Therapie der Syphilis. Von G. R. R. Prof. Dr. UHLENHUTH und Dr. P. MULZER. Aus den Kaiserlichen Gesundheitsamte. Berlin: JULIUS SPRINGER. Price 17.40 m.

Spa Treatment. By NEVILLE WOOD, M.D., M.R.C.P. ADLARD & SON. Price 2s. net.

Eleventh Annual Report of the Bureau of Science. Manila.

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Die Geschlechtskrankheiten und die ärztliche Verantwortlichkeit. Von Dr. GERHARD HAHN. Halle: CARL MARHOLD. Price 1 m.

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E. Merck's Annual Report. 66, Crutched Friars, E.C. Price 1s. 6d. net.

Lehrbuch der Haut- und Geschlechtsleiden. Bd. ii. By Sanitätsrat Dr. S. JESSNER. Würzburg: CURT KABITSCH.

Du Traitement de la Syphilis par le 606. By Dr. E. JEANSELME. Paris: MASSON ET CIE.

THE BRITISH JOURNAL OF DERMATOLOGY.

DECEMBER, 1913.

TINEA IMBRICATA (TOKELAU).

By ALDO CASTELLANI, M.D.,

Director, Government Clinic for Tropical Diseases, Colombo, Ceylon.

HAVING had the opportunity of investigating *Tinea imbricata* during several years, it may perhaps be of some slight use to those interested in the malady if I give a general account of the disease based chiefly on my own experience.

DEFINITION.

The term "*Tinea imbricata*" is used to denote a tropical dermatomycosis, or, more correctly, a group of dermatomycoses, due to fungi of the genus *Endodermophyton*, and clinically characterised by the presence of extensive, flaky, scaly patches, the scales being large, tissue-paper-like, firmly adherent by their bases and arranged in concentric rings or parallel lines.

SYNONYMS.

As is the case with several other tropical diseases, such as framboesia and oriental sore, there is a very large number of synonyms, which may be classified as follows:

(a) From the name of the centres where the disease is rife; for instance, the term "*Tokelau*," generally used by French writers, is in reality the name of an island, Tokelau, where the malady is very

common. Other synonyms are "Tokelau ringworm," used by Tilbury Fox, "Bowditch ringworm," the name Bowditch being used by some writers to indicate the island of Tokelau, "South-west Gune," the term "gune" meaning skin.

(b) From the name of the patient who first introduced the disease in certain countries. In the island of Tokelau, for instance, the disease used to be known as "Le Pita," from "Peter," the name of the native of Tamana, one of the Gilbert Islands, who, according to Turner, in 1850 introduced the disease into Tokelau.

(c) From certain clinical appearances: "Tropical ichthyosis," a bad term, as in the tropics true ichthyosis is far from rare; "Dermatomyecosis chronica figurata exfoliativa" (Tamson); "Herpes farinosus" (Ritter); "Herpes desquamans" (Turner); "Tinea imbricata," a term introduced by Manson, and which is now the one most generally used.

(d) From the generic name given to the fungus: "Aspergillosis of Wehmer"; "Epidophytosis of Tribondeau"; "endodermophytosis of Castellani."

(e) From the name of the authors who have more completely studied the disease: "Manson's herpes," "Turner's herpes," etc., the term "herpes" being used by Roux and others in the obsolete meaning of epiphytic skin-disease.

(f) Terms apparently of unknown origin, such as "Gugo," a denomination much used in the Marshall Islands; "Cascado," a term used in the Moluc Islands, "Buckwar," etc.

HISTORY.

The first recognisable account of the condition is to be found in Dampier's *Voyage Round the World*, published in 1789. Dampier saw the disease in the Philippine Islands in Mindanao, in Guam, and in the Ladrone Islands. About the end of the same century Dentrescasteaux described cases of the same condition in Tonga. In 1811 Marsden observed it among the natives of Polo Mas, on the west coast of Sumatra. In Alibert's *Atlas*, published in 1832, there is a reference to the disease. In 1841 the disease was recognised by the medical officers attached to the United States Exploratory Expedition led by Commodore Wilkes, and Fox in 1844 described it



TO ILLUSTRATE DR. ALDO CASTELLANI'S ARTICLE ON *TINEA IMBRICATA* . TOKELAU



under the name of "gune," the term used by the Gilbert Island natives.

In the reports of the Samoa Medical Mission for the year 1869 there is a good description of the malady by Geo. Turner. In 1874 Tilbury Fox gave a description of the complaint under the term *Tokelan ringworm*, and noted the presence of a fungus in the scales sent to him from the Tropics. He considered it to be identical, or very similar to, the fungus of European ringworm. From the drawings given the fungus described by him seems, however, not to have been a trichophyton-like organism, but an aspergillus-like contamination. From that time discussions began, which went on for several years, on the subject whether the disease was a separate entity or merely European "ringworm" modified by the different climatic conditions. Apparently the great majority of the European authorities, who, however, had no personal experience of the condition, were against considering the disease a separate one, while the medical men practising in the tropics generally believed it to be a different disease from ringworm. Valuable researches were carried out by McGregor in 1870 and Königer in 1878. Manson's researches on the malady—in China from 1879 to 1882—are by far the most important. He gave a complete clinical description of the malady, and introduced the very appropriate name of *Tinea imbricata*; moreover, he very correctly described the microscopical appearances of its fungus, though, as might be expected, using the technique of that time, attempts at growing it did not succeed. Manson's researches have deservedly remained classical. Recently the condition has been studied by Tribondeau, Nieuwenhuis, Wehmer and many others.

CLIMATOLOGY.

The home of *Tinea imbricata* seems to have been the Malay Peninsula, from whence it spread towards the south and the east to many islands of the South Pacific, northwards to some parts of China, as far as Foochow and Formosa, and westwards to Burma and Ceylon. The Gilbert group of islands seems to have become heavily infected since the beginning of last century. In 1859 it is said that a native of Tamana, an island of the Gilbert group, affected

with the malady, landed at Bowditch, an island called also Tokelau, in 1859. From that year onwards the disease spread rapidly all over the Bowditch or Tokelau Island. The Tamana man who brought the disease was called Peter—hence the disease became known in Bowditch or Tokelau as “Le Pita,” viz. “The Peter.” From Tokelau the disease spread to Samoa, according to Turner and Königer, in 1869, and to many other islands, where it became known as Tokelau. At the present time the disease is extremely common in the Malay Peninsula, some parts of Indo-China and Southern China, Borneo, Samoa, Java, the Solomon Islands, New Guinea, Sumatra, Fiji. According to Daniels the disease was first introduced into Fiji by some Solomon Islanders in 1870, and within the following two years became extremely prevalent. In certain of the Pacific Islands one third to one half the population is affected. The disease is common in some districts of the Philippine Islands, the Ladrones, the Loyalty Islands, New Caledonia, and some districts of Burma. Until 1904 the disease was believed to be non-existent in Ceylon, but in that year the writer recorded the first case. During the last seven years the disease has greatly spread in this island, and it is now fairly common, though not so common as in the Malay Peninsula or Fiji. India is said to be so far immune, but two typical cases hailing from Southern India have been seen by the writer. Cases have been reported from Brazil and other parts of tropical America, but some doubt has been expressed as to their being cases of true *Tinea imbricata*. So far no cases have been reported from Africa.

The climatic conditions favourable to the rapid development and spread of the disease are represented by a warm, damp, equable climate, with a temperature of 80° to 90° F., the same climate, as Manson so truly remarks, that is favourable to the growth of coconuts: in fact the geographical distribution of *Tinea imbricata* corresponds almost exactly to the districts where coconuts thrive. In those countries which, though at certain times extremely hot, have a cold and cool season—such as many parts of India and China—the disease apparently does not spread.

ÆTIOLOGY.

Until recently there has been much difference of opinion on the ætiology of the disease. Tilbury Fox in 1874 described a trichophyton-like fungus, though from the illustrations given the fungus somewhat resembles aspergillus. In 1879, Manson, in China, described very completely and correctly the fungus as a trichophyton-like hyphomycete; he stated that it somewhat resembled the fungus of European ringworm, but was of a different species, being



FIG. 1.—*Tinea imbricata*, fungus in the scale. (Micro-photograph from a stained preparation.)

distinguishable by the enormous amount of it present in the scales, and by the fact that *Tinea imbricata* is clinically absolutely different from ringworm. With the laboratory technique of that time attempts at cultivation did not succeed. Manson inoculated scales in normal individuals and reproduced the disease typically. He made a series of inoculations, and showed that the disease always presented the same characteristics and never those of ringworm; he therefore justly sided with those who considered the complaint to be a separate disease and not ordinary ringworm—the opinion then held by most authorities in Europe. Blanchard, of Paris, some years later studied the fungus on scales sent to him from the tropics: he considered it to be a non-cultivable trichophyton and named it *Trichophyton concentricum*. On the other hand, Nieuwenhuis in Java stated that it was

quite easily cultivable and was characterised by the colonies being crateriform. His researches were not confirmed. In recent years the prevalent opinion has been that aspergillus-like fungi are the real cause of the malady. Tribondeau has described fructifications somewhat similar to those of an aspergillus, and has created for the fungus the genus *Lepidophyton* (from *λεπι* = scale, *φυτον* = plant). Wehmer has described it as a true aspergillus which he has named *Aspergillus Tokelau*. From the investigations I have carried out in Ceylon I have come to the conclusion that fungi of the genus aspergillus, and similar ones, have nothing to do with the disease. When

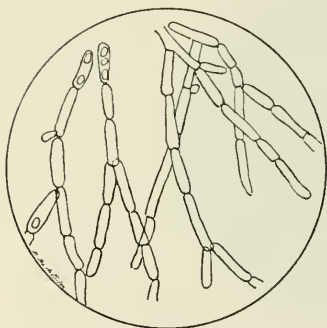


FIG. 2.—*Endodermophyton concentricum* (hanging-drop culture).

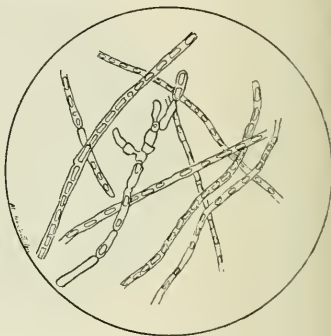


FIG. 3.—*Endodermophyton indicum* (hanging-drop culture).

they are present in the squamæ, they are merely saprophytes or contaminations. By using a special technique I have succeeded in growing the true fungi causing the disease, as proved by the fact that by inoculating pure cultures of the fungi I have typically reproduced the malady in human beings. For these fungi I have suggested the creation of a new genus—the genus *Endodermophyton*. I consider that there is a plurality of species of such fungi, similarly to what is the case with *Tinea corporis*. So far I have grown two separate species: I have suggested that the specific term “concentricum” introduced by Blanchard many years ago should be retained for one, though when the term was introduced by Blanchard the fungus was not grown and there was no suggestion of a possible

plurality of species of fungi; the other one I have called *Endodermophyton indicum*.

Remarks on the genus Endodermophyton.—The fungi belonging to this genus are characterised by their growing between the superficial and deep strata of the epidermis, forming an interlacing felt of mycelia, which detaches the horny and granular layers from the rete Malpighi. They do not invade the hair-follicles and do not cause suppuration. Botanically these fungi are closely allied to the *Achorions*, as remarked by Sabouraud and Pinoy, who have examined the writer's cultures. Attempts at cultivation failed for a long time, as the fungi do not generally grow on solid media direct from the scales. These, after being treated with alcohol for from five to ten minutes, must be placed in glucose broth-tubes, one scale in each tube. Most of the tubes become contaminated with bacteria, but in those which remain clear, after a time (five to ten days) a few delicate short white filaments will be seen originating from the scale. The growth slowly increases, until after three or four weeks it takes the appearance of a small white fluffy mass with a dark spot (the scale) in the centre. Portions of the broth cultures are sown on solid sugar media, on which growth takes place now quite easily. Fungi can then be indefinitely subcultured on solid media. The fungi grow much more abundantly on glucose agar, 4 per cent., than on Sabouraud or any other media.

Reproduction.—In hanging-drop cultures long mycelial filaments are seen; no conidia-bearing hyphæ are present. Reproduction is apparently by sprouting, branching taking place, but further investigation is necessary on the subject.

Pleomorphism is much less marked than in the *Trichophytons*, *Epidermophytons* and *Achorions*. Old cultures, however, may lose their characteristics, becoming covered with duvet.

Table showing Endodermophytons found in Man.

Genus.	Species.	Malady.
Endodermophyton, { Cast., 1909	{ <i>E. concentricum</i> , Blanchard, 1901 <i>E. indicum</i> , Cast., 1911 . <i>E. castellanii</i> , Perry, 1907 .	{ Tinea imbricata Tinea intersecta

ENDODERMOPHYTON CONCENTRICUM: *microscopical and cultural characters*.—Preparations in liq. potass. from scales show a felt of interlacing mycelial tubes; the segments are rather regular in shape, somewhat square-shaped and usually straight. If the liq. potass. be left to act some time, the mycelial articles, which are of very variable length and $2\frac{1}{2}$ to $3\frac{1}{2}$ μ in breadth, will be seen to have a double contour. Aspergillus-like fructifications are always absent in my experience. Fresh preparations from young cultures show abundant septate mycelium with rather long straight articles; in old cultures the shape of the mycelial tubes may be irregular. In hanging-drop cultures (Sabouraud's broth) long mycelial septate threads are seen; no free spores. Reproduction, apparently, is by sprouts from the mycelium, branching taking place. No spore-bearing hyphæ are present.

The cultural characters on solid media when the growth is fifteen to twenty-one days old are as follows:

Glucose agar (4 per cent.).—Growth abundant, surface cerebriform or crinkled. The growth and the medium show a light amber colour which later on may become of much deeper hue. No duvet.

Sabouraud agar.—Growth apparently scanty, whitish-grey, mostly submerged. The colonies have generally a small central knob, and never show any duvet. The submerged portion is very firmly embedded, and presents projections deepening in the medium; colour of the medium unchanged.

Mannite agar (4 per cent.).—Appearance somewhat similar to glucose, but growth less abundant. The medium may take a slight amber colour. No duvet.

Saccharose agar (4 per cent.).—Growth rather scanty, similar to Sabouraud. Duvet absent.

Glycerine agar (4 per cent.).—Similar to Sabouraud. When the colonies coalesce the growth shows a knobby surface. No duvet.

Nutrose agar (4 per cent.).—Slow growth; separate young colonies have a central knob; when they coalesce a knobby mass is formed.

Agar.—Scanty growth, somewhat similar to Sabouraud. No duvet.

Maltose agar (acid).—Similar to Sabouraud.

Maltose agar (alkaline).—Similar to Sabouraud.

Alonite agar.—Not very abundant, cerebriform. Duvet absent.

Galactose agar.—Knobby or cerebriform.



FIG. 4.—Endodermophyton concentricum. (Glucose agar culture.)



FIG. 5.—Endodermophyton concentricum. (Glucose agar culture.)

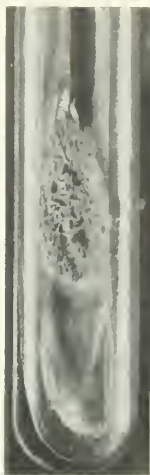


FIG. 6.—Endodermophyton concentricum. (Old glucose agar culture.)

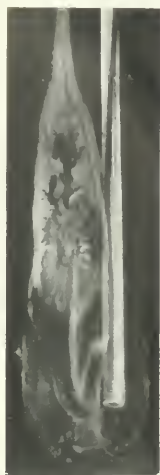


FIG. 7.—Endodermophyton concentricum. (Maltose agar culture.)

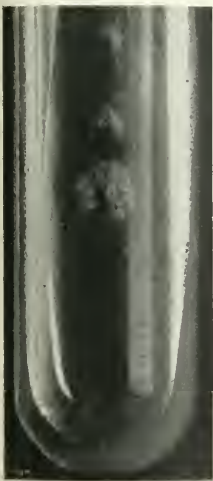


FIG. 8.—Endodermophyton concentricum. (Agar culture.)



FIG. 9.—Endodermophyton indicum. (Glucose agar culture.)

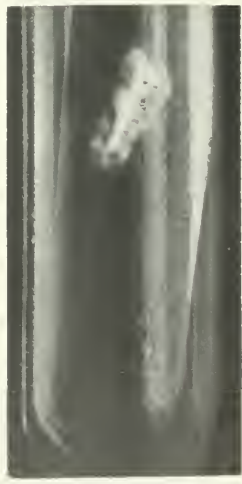


FIG. 10.—Endodermophyton indicum. (Agar culture.)



Levulose agar.—Knobby.

Raffinose agar.—Cerebriform.

Inuline agar.—Cerebriform.

Saccharose agar (4 per cent.).—Somewhat knobby surface. Duvet absent.

Lactose agar.—Similar to Sabouraud, but surface growth more abundant.

Gelatine.—Very slow liquefaction of the medium.

Milk.—Very scanty growth, after a time the medium becomes separated.

Sugar broths (maltose, lactose, etc.).—Slight growth at the bottom of the tube; no production of acid or gas.

ENDODERMOPHYTON INDICUM: *microscopical and cultural characters*.—The microscopical appearance of this fungus is to all purposes identical to that of *Endodermophyton concentricum*. The cultural characters on solid media when the growth is between fifteen and twenty-one days old are as follows:

Glucose agar (4 per cent.).—Growth fairly abundant, with surface somewhat convoluted or furrowed; a portion of the growth, often the central, is of a deep orange, or pinkish-orange, or reddish-orange colour. The surface of the rest of the growth appears white and powdery, being covered by a very short delicate duvet.

Sabouraud agar.—Slow growth, white powdered surface, either with central knob or furrowed. The growth does not deepen in the medium so much as *Endodermophyton concentricum*.

Mannite agar.—Growth knobby or convoluted, covered by short white duvet.

Saccharose agar.—Cerebriform, covered by white duvet.

Saccharine.—Crinkled surface; delicate white duvet present.

Maltose agar (acid).—Somewhat similar to Sabouraud, but the surface growth is more abundant.

Maltose agar (alkaline).—Similar to acid maltose, but the white duvet is more abundant.

Lactose agar.—Knobby surface covered by snow-white duvet.

Glycerine agar.—Growth abundant, yellowish or amber colour; delicate, white short duvet present on some portions of the growth.

Nutrose agar.—Yellowish surface; crinkled, short white duvet present.

Agar.—Growth fairly abundant; knobby surface covered by snow-white, very short delicate duvet.

Lerulose agar.—Scanty growth, yellow or orange, scarce; very short white duvet present.

Galactose agar.—Fairly abundant, surface convoluted with abundant short snow-white duvet.

Raffinose agar.—Same appearance as galactose.

Inuline agar.—Same appearance as galactose and raffinose agars.

Adonite agar.—Cerebriform, covered with snow-white duvet.

Gelatine.—Very slow liquefaction.

Litmus milk.—Very scanty growth; after a time the medium may become separated.

Various sugar broths (maltose, lactose, etc.).—Slight growth at the bottom of the tube. No production of acid or gas.

Comparison between the Cultural Characters of Endodermophyton concentricum and Endodermophyton indicum.

The annexed table shows at a glance the different cultural characteristics of the two fungi in the principal media.

Media.	<i>E. concentricum.</i>	<i>E. indicum.</i>
Glucose agar .	Amber colour	Deep orange, with occasionally pinkish or red hue; white very short delicate duvet present.
Sabouraud agar .	Growth scanty, mostly submerged grey-whitish; duvet absent	Surface growth more abundant, powdery white.
Agar	Scanty, mostly submerged, similar to Sabouraud agar, no duvet	Fairly abundant, knobby; well-marked snow-white duvet.
Glycerine agar .	Growth mostly submerged, surface growth very scanty, similar to Sabouraud agar; no duvet	Surface growth very abundant, crinkled appearance; white short duvet present.

PREDISPOSING CAUSES.

As regards age, many authorities state that the disease is more common in children than in adults. In Ceylon, however, the condition is rare or absent in infants and children, while the persons affected are generally young adults, but it may be found also in very



FIG. 11.—*Tinea imbricata*.



FIG. 12.—*Tinea imbricata*.

TO ILLUSTRATE DR. ALDO CASTELLANI'S PAPER ON *TINEA IMBRICATA* (TOKELAU).



FIG. 13.—Tinea imbricata.



FIG. 14.—Tinea imbricata.

TO ILLUSTRATE DR. ALDO CASTELLANI'S PAPER ON *TINEA IMBRICATA* (TOKELAU).



FIG. 15. Tinea imbricata.



FIG. 16.—Tinea imbricata (back).

TO ILLUSTRATE DR ALDO CASTELLANI'S PAPER ON *TINEA IMBRICATA* (TOKELAU).



FIG. 17.—*Tinea imbricata* (thighs).



FIG. 18.—*Tinea imbricata*.

TO ILLUSTRATE DR. ALDO CASTELLANI'S PAPER ON *TINEA IMBRICATA* (JUNE 1907)

old persons. Women are attacked less frequently than men. Villagers and people living in the country are much more liable to contract the malady than people living in large towns. It is doubtful whether there is any racial disposition. In Fiji, however, it has been observed that while extremely common in the indigenous population, it is comparatively rare among the immigrant Indian coolies. The Tongans also are said to contract the disease rarely, and this relative immunity, according to them, is due to the habit they have of regularly anointing their bodies—a habit not shared by the Fijians. A hot, moist, equable climate seems to be the most suitable for the development of the fungus and the spreading of the disease. Manson has justly remarked that the climate which is suitable for the growth of cocoanuts is also the best for the fungus of *Tinea imbricata*.

SYMPTOMATOLOGY.

The eruption begins with one or several small, roundish or oval, slightly raised, dark brownish patches, very itching. Soon the central portion of each patch splits, and a ring of flaky large scales attached at the periphery is formed. This scaly ring extends peripherally, and in the meantime another brownish patch appears in the centre at the site of the first brown spot; the new brownish patch breaks and a second scaly ring is formed, which extends peripherally inside the first ring, and so on until a very large roundish patch is formed, containing several concentric scaly rings. Manson has aptly compared this formation of rings to concentric ripples produced by a stone thrown into a pool of water, and when the eruption starts from many points, as is often the case owing to auto-infection, it is as if a shower of stones had fallen in the pond, and many systems of spreading rings are produced which intersect each other in various directions, and give rise to a more complex pattern. The patches extend at the rate of a quarter to half an inch a week. In a well-marked, advanced case of the disease the skin of practically the whole body is covered with round patches, each of which presents several concentric, not inflamed, scaly rings. The scales are flaky, resembling tissue paper, of large size—up to half an inch in length—dry, of a dirty greyish or brownish colour, and slightly curled. The largest scales are generally found on the back. Each scale has a

free border, and is firmly attached by the opposite side; the free border of each scale is towards the centre of the circle, while the attached border is towards the periphery. If the scales are removed rings of concentric circular dark lines remain visible, a quarter to half an inch apart. The number of rings forming the patch varies; as many as eight and ten may be present in the same patch. The eruption may spread to any part of the body except the scalp. Though several authors state that the eruption never affects the face or axilla, and rarely the palms and soles, it is often observed in such situations. The nails may be affected and become much thickened, with rough surface and deep cracks. Scrapings examined in liq. potass. show the fungus. The fungus never invades the hair-follicles. The general health is not much affected, but the patients complain of the disfigurement and of the unbearable pruritus. The pruritus greatly increases apparently if the patient is given certain diets—for instance, dry-fish diet. In the hot season the pruritus is much more marked. The disease is very chronic and very difficult to cure. In many cases the blood shows a certain degree of eosinophilia, the number of eosinophile leucocytes varying between 6 and 16 per cent. In some cases the eosinophilia is probably due to the presence of intestinal worms; the eosinophilia is, however, observed also in some cases in which the microscopical examination of the fæces does not show any ova of worms. In very old cases the eosinophilia is more marked than in recent ones, and signs of anæmia may be present.

Clinical varieties.—The eruption may after a time or from the very beginning have a diffuse appearance instead of that of concentric rings. The scales, however, are typical and identical to those found in the concentric type, viz. they are large, tissue-paper-like, partially covering each other like tiles on a roof, and most of them firmly adherent by their bases. One variety of the disease is characterised by the facility with which extensive pieces of epidermis can be stripped off (see Fig. 17)—a condition almost comparable to moulting.

The same fungus, viz. either *Endodermophyton concentricum* or *E. indicum*, may give rise at times to the concentric type, at other times to the diffuse type. In some cases the lesions caused by *E. indicum* seem to be slightly different from those given by *E. concentricum*, the lesions caused by the former being perhaps a little



FIG. 19.—Tinea imbricata (thigh).



FIG. 20.—Tinea imbricata (back).

TO ILLUSTRATE DR. ALDO CASTELLANI'S PAPER ON *TINEA IMBRICATA* (TOKELAU).



FIG. 21.—*Tinea imbricata*.



FIG. 22.—*Tinea imbricata*.

TO ILLUSTRATE DR. ALDO CASTELLANI'S PAPER ON *TINEA IMBRICATA* (TOKELAU).

more superficial and the scales not situated so close together, but further investigation is necessary on this point. In my opinion further researches will probably show that there are several other species of Endodermophytos each of which will probably give rise to a slightly different type of the disease.

EXPERIMENTAL REPRODUCTION OF THE DISEASE.

The disease is easily reproduced in human beings by inoculating scales, as was done by Manson, or pure cultures of the fungi as done by the writer. The incubation period by the first procedure is eight to ten days. By inoculating cultures of the fungi the incubation period is generally somewhat longer (twelve to twenty days), but the eruption develops typically (see Figs. 24 and 25). It is of interest to note that if very old cultures are used instead of young ones the inoculation may fail completely, or merely an evanescent, superficial, papuloid, trichophytic-like patch may be induced (see Fig. 26).

DIAGNOSIS.

This is easy, the presence of concentric rings fringed with large tissue-paper-like scales being characteristic. Even when the concentric rings are not present and the eruption is diffuse the diagnosis is not difficult, being based on the characteristic large, dry tissue-paper-like scales, overlapping each other like tiles on a roof, and containing under microscopical examination an enormous amount of interlacing mycelial tubes.

Differential diagnosis: Ringworm.—Tinea imbricata has an absolutely different clinical aspect from any type of body ringworm; inflammatory signs are totally absent and the scales are very large, flaky, firmly attached by their bases and arranged in parallel lines or concentric circles. The scales contain an enormous amount of the fungus.

Ichthyosis.—The medical man newly arrived in the tropics often mistakes the disease—when of the diffuse type—for ichthyosis, so much so that it has also received the name of tropical ichthyosis. The microscopical examination of the scales will clear the diagnosis at once.

Pityriasis rubra.—In Tinea imbricata there is not the intense hyperæmia of the skin, and the scales are firmly attached. The

microscopical examination will clear the diagnosis in any doubtful case.

Tinea intersecta.—*Tinea intersecta* begins in a manner somewhat similar to *Tinea imbricata*, dark-brownish patches being present at first, and the fungus in both eruptions growing between the superficial and deep strata of the epidermis. In contrast to *Tinea imbricata*, however, the eruption never develops in concentric rings, the scales are not firmly attached, and the cure is easy.

PROGNOSIS.

The disease has no tendency to spontaneous cure, and the treatment is difficult. The general health is not much affected, but the patient complains of the disfigurement, which is very great, and of the pruritus, which in the hot season may be unbearable. Europeans complain also of pain, especially if the fungus attacks the hands. In very chronic cases signs of anæmia, general weakness and emaciation may appear. Coolies affected with the malady in an advanced stage are unable to work owing to the extreme pruritus; hence the disease is of great economical importance, as it may greatly decrease the supply of labour on estates, etc.

TREATMENT.

That *Tinea imbricata* is a disease extremely difficult to cure, all medical men who have met with it in the tropics will readily admit. An improvement of the condition may be easily obtained, and even a disappearance of the eruption, but so soon as the treatment is discontinued the eruption in most cases reappears.

In the Colombo Clinic for Tropical Diseases the writer has made experiments to test the efficacy of different treatments by applying simultaneously different ointments, etc., to symmetrical parts of the body. The results were as follows:

Calomel and other ointments of mercurial preparations do not induce any improvement.

Thymol and *naphthol* ointments may cause a slight improvement.

Carbolic acid and *epicarin* ointments have no effect whatever.

Sulphur has practically no effect on the fungus.

Turpentine usually induces at first a slight improvement; some scales disappear and the skin becomes smoother. As soon as the



FIG. 23.—*Tinea imbricata* (old case).

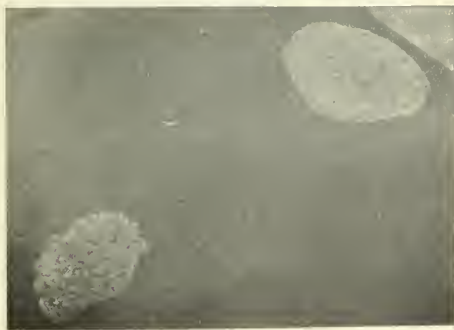


FIG. 24.—Experimental *Tinea imbricata* obtained by inoculating cultures of *Endodermophyton concentricum*.

TO ILLUSTRATE DR. ALDO CASTELLANI'S PAPER ON *TINEA IMBRICATA*
(TOKELAU).



FIG. 25.—Experimental *Tinea imbricata* obtained by inoculating cultures of *Endodermophyton indicum*. (Compare Fig. 24. Note the different clinical aspect from experimental *Tinea imbricata* obtained by inoculating cultures of *Endodermophyton concentricum*.)

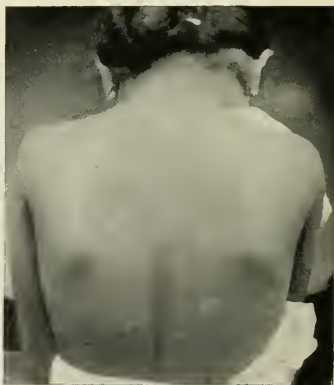


FIG. 26.—Evanescent, papuloid, trichophytic-like patches obtained by inoculating *very old* cultures of *Endodermophyton concentricum* instead of young cultures.

turpentine application is discontinued, however, the typical scales reappear.

Cyllin ointment (20 to 50 per cent.) sometimes induces a temporary improvement.

Formalin has very good effect on localised patches. The usual 40 per cent. solution is applied with care, treating each time a small portion of the eruption. Formalin often causes severe pain and a certain amount of inflammation; this may be relieved by applications of iced-water. The patches become dark-brownish in colour soon after the application of formalin; this colour last a few days, then clears. It is very necessary that care should be taken not to apply the formalin to too large portions of the skin, and not to repeat the application too often, otherwise a form of apigmentation similar to leucodermic patches may appear later on, to which disfigurement coloured patients very strongly object.

Chrysarobin ointment (5 to 10 per cent.) in repeated applications often induces strikingly rapid improvement in cases which are not of long standing. The eruption recommences, however, very shortly after its apparent disappearance. Chrysarobin is a very toxic medicament; the patient must be watched and the urine regularly examined. In one case symptoms of absorption appeared after a single application.

Salicylic acid and *methyl salicylate* have practically no action on the fungus.

Tinctura iodi and *linimentum iodi*: The former, freely applied, induces a very marked improvement, which, however, is not permanent. The latter, as recommended by Manson, is most effective where the patient is not a woman or a child with a skin too delicate to bear it.

Resorcin and *tincture of benzoin*. Resorcin, either alone or mixed with salicylic acid in alcoholic solution and in ointments, has not much effect. If, however, resorcin be dissolved in tincture of benzoin, very good results are obtained. It is notable that tincture of benzoin without resorcin has very little effect.

Resorcin dissolved in *tinctura benzoini composita* (60 to 120 gr. of resorcin to 1 oz. of the tincture of benzoin) is now the routine treatment of *Tinea imbricata* in the Colombo Clinic. It is applied freely once or twice daily on the affected regions. In cases where the whole body is affected, half the body is painted one day and the other

half the next day, and so on alternately. The treatment must be continued for several weeks. Once or twice a week the patient is given a very hot bath, and may be scrubbed all over with sand-soap. Symptoms of absorption are rare, but it is always prudent to proceed with care at first, as it is well known that some individuals have idiosyncrasy for the drug. To sum up, strong liniment iodi, or resorcin dissolved in tr. benzoini (resorcin 3ij, tr. benz. 3j), or chrysarobin ointment (5-10 per cent.) are, on the whole, the most satisfactory routine treatments.

PROPHYLAXIS.

Some authorities recommend isolation; this is good wherever possible, but in regions where the disease is or has become endemic usually the great number of people suffering from the disease render the measure hardly practicable. In those tropical countries, however, where the disease has not yet appeared, the medical officers would do well to be on the look-out for it, and if a case is reported the patient should certainly be kept isolated and thoroughly treated before being allowed to mix with the general population, and all infected clothing should be boiled or burnt. The writer has seen an epidemic of *Tinea imbricata* in a hospital in which a patient suffering from the disease was admitted and allowed to mix with the other patients. There is a general native belief that anointing the body with cocoanut oil or other oil will prevent infection; there may be some truth in the belief, but such a measure cannot be carried out in Europeans. Any itchy, scaly spot in the slightest way suspicious of incipient *Tinea imbricata* should be immediately treated with lin. iodi., chrysarobin ointment, or resorcin dissolved in tr. benzoini. While the treatment of *Tinea imbricata* in an advanced stage is extremely difficult, it is easy to stop the initial patches by these means.

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ROYAL SOCIETY OF MEDICINE.

DERMATOLOGICAL SECTION.

MEETING held Thursday, November 20th, 1913, Dr. J. J. PRINGLE, President of the Section, in the Chair.

Dr. H. G. ADAMSON showed a case of *multiple Lupus vulgaris in an adult simulating Lupus erythematosus*. This case was shown at the meeting of the Section on July 17th, 1913,* as one of *Lupus erythematosus* of the face with *Lupus vulgaris* of the abdomen. Different opinions were expressed as to the diagnosis. Dr. Pringle regarded the case as an example of the "nodular type" of erythematosus lupus of Radcliffe-Crocker, "which was in reality a distinctly tubercular disease." Others suggested the diagnosis of *Mycosis fungoides*.

Since the exhibition of the case in July the patches on the face have gradually changed their character. The diffuse dusky redness has cleared up, revealing small reddish-brown nodules—typical "apple-jelly" lupus nodules. A microscopical examination of a piece of tissue both from a patch on the forehead and from a patch on the abdomen shows typical "tubercles," with giant-cells, plasma-cells and epithelioid cells. The appearances are quite unlike those of *Lupus erythematosus*. The alternative diagnosis of *Lupus pernio* was suggested by the exhibitor at the last meeting, and it may be remarked that the patches do resemble *Lupus pernio* in the presence of a diffuse redness which in the earlier stages marks the lupus

* *Brit. Journ. Derm.*, 1913, p. 255, and *Proceedings*, 1913, vi, p. 181.

nodules, and in the multiplicity and rapid onset of the lesions; but they differ from the lesions of *Lupus pernio* in that they do not attack the extremities.

The case is particularly interesting because it shows that *Lupus vulgaris* may imitate *Lupus erythematosus*, and it suggests that those exceptional cases of supposed *Lupus erythematosus* which have been claimed as tuberculous may be imitations. There has been a marked improvement under treatment by X-ray applications combined with the use of salicylic acid plaster-mull. A von Pirquet reaction was strongly positive, a Wassermann negative.

The PRESIDENT said he remembered the case being shown at the July meeting of the Section. The general impression then was that the lesions on the abdomen were undoubtedly *Lupus vulgaris*, and that there was some doubt as to their nature on the face, which he personally thought to be frankly tuberculous. The remarkable improvement which had taken place under treatment confirming that opinion had quite cleared up the diagnosis, and Dr. Adamson deserved special thanks for bringing the case again before the Section.

Dr. H. G. ADAMSON also showed a case of *Mycosis fungoides*. Mrs. H. H—, aged 65 years. There had been no skin-trouble until three or four years ago. The eruption began as red patches on the face, and these were soon followed by patches on the body. The red patches then began to scale, at first "like flour," afterwards in large flakes. She lost her husband eighteen months ago, and the eruption has spread more rapidly since then, until now it is present in every part of the skin. Her general health has been good. There has been a little itching over the shoulders, but not much, and there is none now. Ten years ago her left eye was removed for some disease "at the back of the eye." The present eruption consists of sharply circumscribed, dusky red, slightly raised and scaling patches. Some patches are disc-like, others in circles, and others roughly crescentic. They vary in size from half an inch across to several inches, and they are so numerous that they are almost touching, and leave only about half of the whole skin surface free. They are present on the scalp, face, neck, trunk, limbs, palms and soles—in fact, everywhere on the skin surface. The superficial appearance of the patches is somewhat that of psoriasis, but they differ from psoriasis patches in that they are slightly raised and distinctly infiltrated, so that they feel two or three times the thickness of the normal skin when pinched up. The

surface of the patches is smooth and glossy under the scales, but some patches are excoriated and some on the shoulders and buttocks are ulcerated and crusted. Over the joints of the fingers and knees and elbows the patches are transversely fissured.

There are no large projecting tumours. The hair is scanty. The nails are normal. There is a general enlargement of the glands, and they may be felt enlarged, especially in the neck, in the groins and above the elbow. The urine is normal. The temperature is normal.

A blood examination gave the following results (September 21st, 1913): Red cells, 3,520,000 per c.mm.; hæmoglobin, 63 per cent.; colour index, 0.35; leucocytes, 7000 per c.mm.; polymorphonuclears, 4410 per c.mm. (63 per cent.); lymphocytes, 1960 per c.mm. (28 per cent.); large mononuclears, 280 per c.mm. (4 per cent.); eosinophiles, 280 per c.mm. (4 per cent.); basophiles, 70 per c.mm. (1 per cent.). Slight anisocytosis. No abnormal cells.

The condition has rapidly improved under treatment by X-rays, but the patient has lost weight. She does not take her food so well in hospital as at home.

Microscopical examination of sections from patches on the arm: (a) Epidermis—there is parakeratosis in the form of a thick layer of swollen nucleated horny cells. There is marked acanthosis, the prickle-cell layer being considerably widened and throwing long, irregular prolongations into the corium. (b) Corium—the papillæ are enormously enlarged. A cell infiltration extends from the apices of the papillæ to half-way towards the sweat-glands. The infiltration is made up of lymphocytes, plasma-cells and epithelioid-cells. There are also numerous mast-cells and large masses of pigment, both confined to the lower margin of the infiltration. The proportion of the three elements of the cell-infiltration varies in different parts. In some parts there are "epithelioid" cells and numerous dilated capillaries. In others there is a mixture of epithelioid-cells, plasma-cells and lymphocytes. In all parts of the infiltration and even in the corium between the infiltration and the sweat-gland level there are numerous dilated capillaries with proliferated wall-cells, some of which in cross-section give the appearance of giant-cells. But there are no typical giant-cells. On the whole the microscopical findings are those of an inflammatory cell infiltration in the corium (a granu-

loma) with marked new formation of capillary vessels, with mast-cells and with deposit of pigment. The epidermis shares in the inflammatory reaction.

Dr. D. VINRACE asked for information as to the frequency of application of X-ray treatment in such cases.

The PRESIDENT said he had a case of Mycosis fungoides now under his observation who had been X-rayed at irregular but very short intervals during the last fifteen years; whenever a suspicious patch appeared he at once came to hospital for further treatment. The disease was thereby controlled and kept in abeyance but not cured.

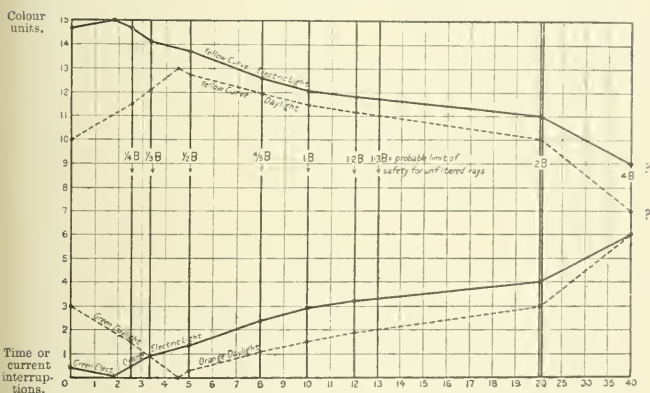
Dr. DORE said he had had two such cases under his care recently, and he had been obliged to repeat the exposures of X-rays frequently, on account of the large extent and rapid progress of the disease. It was inadvisable to limit the action of the rays to each affected area, because commencing lesions might exist under apparently healthy skin.

Dr. DUDLEY CORBETT showed a *new radiometer for Sabouraud's pastilles*. This radiometer is based on the results of experiments carried out on the colour changes occurring in the Sabouraud-Noiré pastille when exposed to X-rays. A summary of some of the observations was published in the *British Journal of Dermatology* for August, 1913. It was also shown that many of the paper standards for tint B, which have been supplied in the past, differ considerably in their colour composition, and have so led to difficulty and even to trouble.

In these experiments the pastille was measured directly after exposure to X-rays in the half-way position by means of a Lovibond's tintometer. This instrument consists of a series of finely graded standard glasses of the three primary colours, each standard being measured and its value determined spectroscopically. They can be inserted into a suitable viewing tube in such a way that by a combination of standards the colour of any given substance can be exactly matched. Using a well-seasoned X-ray tube with dipper break and tachymeter, and keeping the milliamperemeter and qualimeter readings constant, it was possible to determine, by taking a series of cases, the number of interruptions required to produce satisfactory epilation without dermatitis; in other words, the tint B of Sabouraud was expressed in terms of current interruptions, and its exact colour composition ascertained. Further, using the same tube for each series and by taking the average of a large number of observations with other tubes, it was possible to determine the colour composition

of any fractional dose. In this way glass standards for any fractional dose up to 2 B have been fixed. These are viewed against a pure white background, in a suitable instrument, in such a way that the tint of the pastille can be compared with them by looking down the eyepiece. These standards have been worked out for daylight and for electric light from an 8-c.p. carbon-filament lamp, the glass of which was obscured in the usual way. There was not a great deal of difference between the results obtained from this lamp and those from a low-power obscured metal-filament lamp, but it was more convenient to take the carbon filament lamp as standard.

The results are best shown graphically by curves :



Curves representing colour developed by Sabouraud's pastille when exposed to X-rays in measured doses. Pastille fixed half-way between skin and anticathode. Ordinates = Lovibond colour units. Abscissa markings = Current interruptions or time, milliamperemeter and qualimeter readings constant. Fixed points = Determined by direct measurement, each being the average of a number of observations.

It is at once seen that the electric light standards have more yellow and orange than those for daylight. When measured to daylight the pastille quickly loses its green colour, until at a point just below half dose there is no colour present but yellow. Orange then rapidly develops, and it is this increase in the orange content that determines the differences between the larger doses. Under electric light there is only a trace of green in the unexposed pastille; this is quickly lost,

to be replaced by orange, which increases at about the same rate as in daylight, but starting earlier reaches a higher mark at Tint B.*

Precautions to be taken when using the radiometer:

(A) *In daylight*.—(1) This should be diffused and as white as possible, preferably north light. On no account should measurements be made near sunlight. (2) Keep the instrument vertical, avoiding shadows.

(B) *Electric light*.—(1) Use an 8-c.p. carbon filament "obscured" lamp in good condition. (2) Keep the instrument vertical, the pastille being about six inches away from the lamp.

In both cases: (1) Examine as quickly as possible, for the pastille fades even in electric light. (2) When one is intending to reach tint B or 1/1 dose, put up the 4/5 standard first of all, then if this is matched it is easy to determine how much more is required to reach the full dose: in this way an overdose can be avoided with certainty. (3) The standard white background must always be used. The differences are rather better marked in daylight, but with a little practice in appreciating the orange increase it is quite easy to work with electric light.

The epilation dose.—Using a medium hard tube, 4/5 B usually produces epilation without erythema, but cannot always be relied upon to do so. It is frequently insufficient for stiff beards and for the top patch in tinea work. 1/1 or tint B always produces epilation, together with some transitory erythema, at about eighteen days. There is always regrowth of hair. 1·2 B always produces epilation, together with marked erythema, and occasionally some transitory dermatitis on the unprotected skin of the nape of the neck and behind the ears. There is no dermatitis of the scalp proper, but there is a smart reaction round any septic foci that may be present. This form of

* An interesting point arose when measuring the unexposed pastille and the 1/4 B and 1/3 B to daylight. It was found that, although it was possible to match the pastille in tint, it was always brighter than standard. Mr. Lovibond tells me that this frequently occurs when the tintometer is used commercially. This brightness is dulled by the interposition of a standard neutral tint composed of a fraction or multiple of one unit of each of the red, yellow, and blue glasses combined together which absorbs the white light reflected from the pastille. Thus the colour sensation transmitted from the unexposed pastille in daylight is: Yellow, 11·5; green, 1·5; light, 1·5, for 1·5 of neutral tint was required to absorb all the white light transmitted. Similarly for 1/4 B and 1/3 B, 0·5 and 0·2 neutral tint were required respectively.

dermatitis, which is little more than a desquamation, clears up in a week. In the few cases of tinea where this figure was reached the regrowth of hair was perfect. But it is probable that this point is very nearly the limit consistent with safety in tinea, and it is rarely necessary to go so far.

Fractional doses.—When one examines the curves it is easy to see that standards for any fractional dose can be provided. The ones selected and especially estimated are those in common use for therapeutic work.

Old pastilles.—A pastille that has once been exposed never returns exactly to its original tint; there is less green, even after thorough bleaching. This fact, however, as far as could be ascertained, makes practically no difference to the orange part of the curve, provided that the pastille has not been used more than two or three times at most and has been well bleached.

The instrument has been in daily use in the X-ray Therapeutic Department of St. Thomas's Hospital for some months, and the results in tinea work have been most satisfactory. We use 4/5 or 9/10 B for all except the top patch, which receives the full dose.

The pastille should be examined in its holder. The instrument can be adapted to take any form of pastille holder. The makers are Tintometer, Ltd., The Colour Laboratory, Salisbury.

The advantages of this radiometer over others where Sabouraud's pastille is employed are:

(1) The colour standards are constant, invariable in tint, easily kept clean, and do not fade.

(2) They have all been verified experimentally in tinea work, and any fractional or multiple dose can be standardised.

(3) There is provision of a separate series for daylight and standard artificial light. A series could be worked out for any constant source of light if required.

Dr. WHITFIELD said that he considered the instrument of great value. One knew the difficulty, especially at this time of year, in doing ringworm cases in the afternoon, when the light was so uncertain; and if it was foggy one was unable to read the pastille. His experience was that none of the standards which were supposed to work with artificial light were reliable. Moreover, every time he got a new book there was some difference in the tints, and the books got dirty. Dr. Corbett's apparatus was remarkably easy to read accurately.

Dr. MACLEOD said that he had had an opportunity of thoroughly examining the instrument, and considered it would be of distinct value in the therapeutic dosage of X-rays, both for the standardisation of the tint B in Sabouraud's radiometer and for the recognition of the tint B in artificial light and the estimation of fractional dosages.

Dr. SEQUEIRA desired to add his word of appreciation, because standardisation had become exceedingly important, especially in the wider use of the rays in ringworm. By an adaptation of this radiometer he believed four, five and six or more pastille doses could be given accurately—a great advantage in the administration of massive doses as was now common for malignant disease. With regard to the remarks concerning artificial light, he was accustomed to work his department entirely with the blinds drawn, the artificial light being tinted to exaggerate slightly the Sabouraud colours. He heartily welcomed the instrument, and congratulated Dr. Corbett on the success of his researches.

Dr. AGNES SAVILL asked whether this new pastille measure could be used on the skin. She always worked with two pastilles—one on the skin, one at half-way distance. It was very useful to work with a pastille on the skin, so that if the patient moved away from the pegs or other focus, one still had the control register on the skin.

Dr. CORBETT replied to Dr. Savill's question in the affirmative. When a pastille in the usual halfway position reached the full B tint a pastille on the skin would measure $1/4$ B. A standard was provided for this.

The PRESIDENT congratulated Dr. Corbett on the apparatus, which was obviously of great utility, and on the success others had obtained with it.

Dr. HALDIN DAVIS showed a case of *psoriasis in a very young infant*. This patient is a healthy and thriving infant, now, at the time of exhibition, about 8 weeks old. The eruption which makes it a subject of interest appeared at the age of one month. A very large proportion of its entire body surface is covered with a figured erythema with scarcely any induration, but with a scaly surface. Where the erythema is limited by healthy skin it shows a circinate outline, suggesting the coalescence of circular patches. The face is involved and so also is the scalp, which when the patient was first seen was covered with a thick adherent crust. Most of the surface of the body and limbs is covered, but the extensor aspect is more affected than the flexor, although the exact points of the elbows and knees are not especially attacked. On the buttocks the eruption is complicated by the presence of a certain amount of napkin erythema. The diagnosis in this case lies between psoriasis and syphilis, but the latter is excluded by the following considerations :

(1) The baby is perfectly well although it has had no anti-syphilitic treatment.

(2) There are no other signs suggestive of syphilis.

(3) It is the youngest of four children, the ages of the others being respectively 11, 7 and 4. All of them are healthy, and the mother has had no miscarriages.

(4) The Wassermann reaction, both of the mother and child, is negative.

It is interesting to note that there is no history, as far as can be ascertained, of psoriasis in the family. In most other cases of psoriasis in early infancy there has been strong evidence of heredity.

Dr. MACLEOD said that he considered that the case was one of the so-called seborrhœic dermatitis rather than psoriasis. Some years ago he had shown an infant, aged 4 months, at the Dermatological Society of London, with the diagnosis of psoriasis, in which the lesions were singularly psoriasiform. The eruption had cleared up subsequently with great rapidity under salicylic acid and sulphur applications, and, as far as he was aware, had not recurred. He came to the conclusion then that his original diagnosis was erroneous and that the affection was a local condition. The case shown by Dr. Haldin Davis was very similar in type.

Dr. WHITEFIELD asked whether Dr. Davis has made a histological examination of the scales for micro-organisms. One might say that psoriasis never showed organisms, whereas seborrhœic dermatitis showed a quantity of organisms.

Dr. ADAMSON did not regard the case as one of psoriasis, but as so-called "seborrhœic dermatitis." He had described this condition in babies in a paper on "Napkin-region Eruptions in Infants" in the *British Journal of Dermatology* (February, 1909, xxi, p. 37), and also in the *St. Bartholomew's Hospital Journal* (May, 1906, xiii, No. 8, p. 119), and in the *British Journal of Children's Diseases* (June, 1908). It had been the subject of a thesis by Dr. Lebard in 1905 ("Sur un type d'érythème fessier évoluant chez les nourrissons atteints d'eczéma séborrhéique"). It was not to be confused with the "erythema of Jacquet" of the napkin region, which attacked the convex surfaces where these were rubbed with the napkin. The "seborrhœic eczema" involved both flexures and convex surfaces, was probably micrococcal in origin, and was rapidly cured by mild sulphur ointments.

Dr. DORE said that in his experience psoriasis in young children responded to treatment more readily than psoriasis in the adult; a weak sulphur or salicylic acid ointment was often sufficient to remove the eruption and sometimes there was no relapse. This pointed to the fact that some of these cases were seborrhœic dermatitis rather than psoriasis.

Dr. HALDIN DAVIS replied that he had not examined the scales, but he would do so, and report the result. The improvement in the child as compared with the condition a fortnight ago was very remarkable. A fortnight ago the redness and scaliness all over were very marked. If the child had been older he would not have had any doubt of the diagnosis, but he thought the only real criterion was to wait for a year or so and see if the condition returned. If it did not, he would confess he was wrong.

Dr. ALFRED EDDOWES showed a case of *Lupus erythematosus*. Girl, aged 14 years, just left school. The disease commenced two years ago. Patient was a mouth-breather—not so now, since a recent operation upon tonsils and for adenoids. Strong history of tuberculosis in family, on both father's and mother's side. The disease upon the face is œdematous and rather acute, but of no special interest. The state of scalp is specially interesting. Her mother says, "Little red bumps form—remain red and tender for a time, then the hair falls and leaves a bald patch. A red spreading margin forms, and as it advances the hair falls, while the hair soon grows again in the centre of each patch."

The condition can still be studied. No local treatment is being employed. There are no stumps such as occur in alopecia areata. It is interesting to observe that when the hair, which is naturally auburn, re-grows, it is black. After a few months' re-growth, however, it returns to its natural auburn tint. There is no permanent scarring.

Dr. A. D. HEATH showed a case for diagnosis (*adult Urticaria pigmentosa*). The patient, a young medical man, had first noticed brown pigmented areas on his forearms when he was living in Natal two years ago. The spots were from $\frac{1}{10}$ to $\frac{1}{8}$ in. in diameter, and they seemed to become slightly raised above the level of the skin when the affected parts were rubbed. The eruption chiefly affected the forearms, lower part of back, and the thighs. The brown spots had slowly increased in number during the past eight months, when the patient was resident in England.

Dr. ADAMSON thought the eruption was *Urticaria pigmentosa*. He had seen two similar cases of what appeared to be *Urticaria pigmentosa* cases in adult life. The urticarial element was not prominent in either of these cases and only became evident on rubbing the skin, when the macules distinctly swelled up. Swelling of the macules could be brought about by friction in the present case. Both cases the speaker had seen were in private patients, and it had not been possible to confirm the diagnosis by a biopsy and microscopical examination.

Dr. WHITFIELD doubted whether the case was one of *Urticaria pigmentosa*. He had seen two similar cases and believed the disease was one *sui generis*. One could never get a biopsy of these cases. He did not think any one of the lesions disappeared. In one exactly similar case he had seen during the last year, the man knew each lesion by sight, and would have known if one had disappeared.

Dr. EDDOWES said if there had been time he would have liked to see if the disease was connected with the hair-follicles or sweat-pores. He was not sure that the sweat-pores did not become infected as much as the follicles. He had

recently watched many rashes which apparently began in the sweat apparatus, not in the follicles. When a case was advanced, that point was a difficult one to settle. In a recent case of acute eczema he found several sweat-pores contained organisms, producing here and there little opaque white blisters. He was able to obtain a culture from the contents—apparently a pure *Staphylococcus albus*.

Dr. PERNET said he had seen *Urticaria pigmentosa* in the adult. He remembered a young Jewish adult in whom the pigmentation was more marked than in this case, and in whom the lesions were larger. Still, one must allow for variations in all directions.

The PRESIDENT said his experience of the *Urticaria pigmentosa* of adults was confined to two cases. One occurred in a soldier under the late Sir Stephen Mackenzie in the London Hospital and the other was a hospital nurse. There were several clinical points of difference from the classical *Urticaria pigmentosa* of children in those two cases. The present patient had well-marked dermatographism and the papules were suggestive of urticarial lesions. There was not much pigmentation, and what there was almost disappeared on diascopy. As far as he was aware the histology of adult *Urticaria pigmentosa* had never been studied. He could see no grounds for accepting Dr. Eddowes's view that the condition was the result of invasion by staphylococci of either sweat-pores or hair-follicles. Possibly the patient would give permission for a biopsy, and Dr. Heath would report on the microscopical findings.

Dr. HEATH replied that his provisional diagnosis was that it was an unusual case of *Urticaria pigmentosa*.

Dr. E. G. GRAHAM LITTLE showed a *case for diagnosis*. A tumour on the shoulder of a man, aged 46 years, a clergyman in a large South London parish. The patient was under the care of Dr. A. E. Wilson, of Lewisham, to whom the Society was indebted for permission to show the case. The history was that about eight years ago the patient noted a small pimple on the shoulder which he attributed to rubbing of the braces. The tumour slowly grew larger but never ulcerated, or changed except by enlarging. At about the same time or somewhat earlier the patient was pronounced by a competent consultant to be suffering from phthisis, and tubercle bacilli were freely present in the sputum. He was now apparently in robust health, and had recently been examined and declared to be free from any symptoms of pulmonary tuberculosis. The tumour was now of the size of a five-shilling-piece, slightly blue in colour over the greater part of the swelling, but at the margins while there was swelling there was no coloration. The surface was lumpy and irregular, and raised from the surrounding level of the skin by about $\frac{1}{4}$ in. Dr. Wilson, who had had the case under observation for some months, was confident that the growth had been much more rapid in the last

few weeks, but there was still no change in the character of the surface except that a single application of carbon dioxide had been made by Dr. Wilson, and slight ulceration of the surface had resulted in two places from this treatment. A notable feature of the tumour was a curiously hard resilient edge, so that the finger passing from healthy to affected skin had the sensation of touching cartilage, the infiltration being of almost keloidal hardness. There was a rather confused history of a tumour similar in appearance having been removed from the front of the chest at the age of twenty-three (the scar of the removal being still conspicuous), and that the report of the doctor who had removed it was that "the disease was bordering on consumption." The clinical aspect of the sole lesion now present was quite unlike any tuberculous manifestation with which the exhibitor was familiar, and the case was shown for diagnosis.

Dr. E. G. GRAHAM LITTLE also showed a case of *syphilis of very unusual character*. The patient, a man, aged 42 years, was under the care of Mr. Duncan Fitzwilliams, who had given the man two injections of neo-salvarsan, which had materially diminished the salience of the eruption. The photographs shown at the meeting had been taken before treatment, and showed fairly well the remarkable prominence of the tumours on the face, giving it something of the aspect of nodular leprosy, and almost constituting the "leonine facies" associated with that disease. The patient had never lived abroad, had contracted syphilis about eighteen years ago, and his blood, recently tested, had given a positive Wassermann reaction. The face was covered with large nodules, closely set together and making a surface rather like that of the "hobnail" liver. The whole scalp was seamed and furrowed, with nodules and depressed scars. The hair was absent over the top and sides of the head. There were large areas of nodular infiltration and scars on the back of the trunk, on the upper arms and shoulders, the middle of the back and the buttocks, on the lower arms, and on the legs and thighs. The two injections of neo-salvarsan had made a considerable improvement in a very short time, the photographs having been taken on October 30th, and improvement was already manifest.

The PRESIDENT said the case was of a type now seldom seen in this country, and he suspected it to be of tropical origin, but the man averred he had never been

out of this country. His remarkable improvement after two injections of neo-salvarsan was eminently satisfactory.

Dr. E. G. GRAHAM LITTLE showed a case of *Lichen planus hypertrophicus*. The patient, a woman, aged about 65 years, had a growth on the upper and inner part of the right leg near the knee. The exhibitor showed the case as one of hypertrophic Lichen planus, being influenced to make this diagnosis by a patch of lichenified skin, 4 in. by 2 in., on the outer and upper aspect of the same leg, which suggested this diagnosis. The growth was more doubtful in character. It was the size of the palm of one's hand, and consisted of lobulated warty excrescences closely grouped, raised a good half inch from the surrounding surface; and in the interstices of the excrescences a very evil-smelling discharge collected. The growth had persisted practically unchanged for three or four years; there was no enlargement of glands in the right groin, and there had not been any ulceration on the surface. There was much itching of the skin affected. No lesion of Lichen planus elsewhere than on the leg could be seen and there was no history of such in the past. The mucous membranes were unaffected.

Sections from the most prominent part of the tumour had been made from two sites and submitted to examination by Dr. E. H. Kettle, who had had a long experience in malignant growths as pathologist to the Cancer Hospital. Both examinations resulted in a denial of any evidence of malignancy. The exhibitor had seen the sections on both occasions, one taken in September and one taken during the last week. In favour of the diagnosis of Lichen planus was the greatly increased thickness of the granular layer of the epidermis. There was some proliferation downwards of the epidermis, but no dissemination of epithelial cells in the corium. There was much inflammatory infiltration round the epidermal downgrowths and considerable increase of pigment-cells.

Sir MALCOLM MORRIS, K.C.V.O., and Dr. S. E. DORE showed a case for diagnosis (*unusual Lupus erythematosus*). The patient, a man, aged 57 years, has suffered severely from gout, and has passed a large quantity of gravel in recent years. The skin-disease dates from April, 1912, when he noticed a small red patch on the back of the left hand, followed a fortnight later by a similar patch on the

right hand. After about two months the face and the back of the neck became affected, and the diagnosis of eczema was made. He then went to Harrogate, where various methods of treatment were tried without success. The condition was then diagnosed as Lupus erythematosus, and he was treated with large doses of salicin for a period of eight months. This treatment was followed by some improvement of the eruption on the hands. In April of the present year Sir Malcolm Morris prescribed mercury and potassium iodide, and the patient underwent a further improvement. His blood gave a negative Wassermann reaction.

Present state: The eruption is situated on the face, forehead, ears, and on both sides of the back of the neck. There are also numerous patches on the back of the hands, and the patient states that his feet have been affected, but the lesions have disappeared. On the left elbow there is a small scaly patch indistinguishable from psoriasis; the skin of the opposite elbow and of the knees is healthy. There are also some patches of an indeterminate nature in the groins and on the scrotum, and three small patches on the chest. The eruption is most acute on the sides of the neck, where there are large confluent, slightly raised areas of a dark red colour, with small intervening areas showing superficial scarring. Both cheeks are extensively affected, the skin being also covered with telangiectases. On the forehead above the left eyebrow there is a small isolated circinate patch. The skin of the ears is red, scaly and atrophied. The dorsal surfaces of the hands and fingers show deep red or bluish, slightly scaly patches, with a tendency to central involution and the formation of rings or segments of circles. In addition to the lesions on the skin there are patches like leucoplakia on the tongue and right buccal mucous membrane on the right side.

The distribution of the lesions on the cheeks, ears and dorsal surfaces of the hands and fingers, their peculiar colour and method of evolution, and the presence of superficial scarring, strongly suggest the diagnosis of Lupus erythematosus. On the other hand, the presence of itching and the peculiar situation and characters of some of the lesions and the patches on the tongue are unlike anything commonly seen in that disease.

Dr. PERNET said the patient had been under his care and the diagnosis he made was Lupus erythematosus; he adhered to that diagnosis. When the patient

came to him the face was acutely and symmetrically involved, as also the hands, which were very swollen, including the palmar aspects. The patient had improved considerably under his care.

The PRESIDENT (Dr. J. J. PRINGLE) said that although he concurred in the diagnosis of *Lupus erythematosus* as regards the lesions of the face and hands, he thought those in the groins and elsewhere were probably *seborrhœic psoriasis*. He had seen the case once in private and then was greatly puzzled by it. A reference to his private notes, made subsequently to the meeting, confirmed the opinion expressed above. In them it was stated that the manifestations first appeared in 1893 on the legs, arms, and scalp.

Dr. GEORGE PERNET showed a case of *Dermatitis artefacta*. The patient, a girl, aged 16, was first seen on November 11th, when the following notes were made: Duration, eight weeks; started on inner side of the left clavicle as four patches, leaving a certain amount of pigmentation. A fresh patch appeared a fortnight previously. It is a crusted lesion of irregular outline. Close to this there is a smaller patch, irregularly quadrilateral. Scattered about the centre of the chest are a number of more or less circular crusted patches, rather close together; others are irregularly quadrilateral and linear. Over the right shoulder is an irregular polygonal patch. Two, more or less circular, on the left breast; also had two patches on the upper part of the back three weeks previously. These have left superficial scarring. Has had various ointments and also iodine. The last application of iodine was done in way of treatment on the day before. On November 18th four fresh lesions had occurred, two days after the patient was last seen. These were over the left breast and were close together. Two other smaller patches just above right clavicle about the size of a sixpenny piece with excoriated crusted centres, irregularly rounded. These fresh patches had not been treated with iodine.

Dr. J. J. PRINGLE showed a case of *Mycosis fungoides*. The patient was a married woman, aged 40 years, who was sent up from Aldershot and admitted to his skin-ward in the Middlesex Hospital on July 18th. Her family and previous personal history were unimportant. She was an intelligent person, who gave the history of her ailment with lucidity. She had been married six years, and had two children. After the birth of her last child in February, 1912, she had "puerperal fever," which lasted for three weeks, in the course of which a red rash developed on her chest. After cessation of the fever, the rash increased in extent, and became irritable. The eruption gradually

invaded the whole body-surface, except the face, and the scalp became scurfy. After the rash had been generalised for only a few weeks, enlargement of glands was noted in the back of the neck, in the front of the neck, in the armpits and in the groins, the patient's attention being drawn to them by pain in these regions consecutively. She averred that the rash was at first patchy all over, but that the patchiness had gradually been obliterated. The face had only been involved for four months, and the hair had fallen rapidly from the scalp and other normally hairy parts for only two months previous to admission, during which time the itching had diminished.

She had been submitted to various forms of treatment. In May, 1912, she consulted a practitioner, who X-rayed her body twice a week for ten months, and gave her several injections of arsenic subcutaneously; she was given some injections of "mixed vaccines" at a homœopathic hospital in November, 1912, and May, 1913; she had also been in a nursing home for eleven weeks in 1913, where she had high-frequency treatment and tar baths *inter alia*.

On admission the patient presented a vivid universal erythrodermia, the dorsal surfaces of the feet being the parts least involved. Over the whole trunk and limbs the redness was somewhat patchy, and there was a great deal of brown pigmentation suggestive of the administration of arsenic, or which might (more probably) have resulted from X-raying. The mottled or marbled appearance thus produced was marked on the face as well as on the trunk, but the mucous membranes were not involved. On and round about the ears there was some discharge and eczematization, while in the great flexures there was a little scaling. The palms and soles were thickened, cracked and scaly. The other parts of the trunk and limbs were covered by dry, harsh, lichenified and quadrillated skin, this condition being most marked over the abdomen. There was no hair on the scalp, in the axillæ, or over the pubic region, and the eyebrows and eyelashes were totally absent. Large masses of slightly tender glands were noted in the inguinal and axillary regions, as well as in the anterior and posterior triangles of the neck and in the pre-auricular and submaxillary regions. The spleen was enlarged and easily felt down to the level of the umbilicus. Two firm nodules, about the size of a bean, were detected by palpation after careful examination embedded in the skin of the left temporal region immediately outside

the orbit and on the left side of the chest outside the nipple. Over the trunk some slightly raised, soft, flat-topped plaques were present, but none were present on the face or scalp. The urine contained a slight excess of indican, but was otherwise normal; there was no evidence of disease of the heart or lungs. The tongue was clean, appetite good, and the patient in good spirits, complaining only of some weakness and lassitude.

In the first ten days of her stay in hospital the patient had a considerable degree, but quite irregular type, of fever, the temperature ranging as high as 103.2° F. Blood-cultures proved to be sterile.

In the beginning of August several small circular ulcers appeared over the scalp and legs, which were referred to the breaking down of dermic lumps not previously noted. They soon healed up after the discharge of some slough. During the exhibitor's absence from town, in the latter half of August and throughout September and October, the patient was under the observation of his colleague, Dr. Voelcker. In the beginning of November, when the patient was re-transferred, many marked changes from her previous condition were noted. Of these the most remarkable were the clearing up of much of the previous erythrodermia, especially over the face, forehead and scalp, and the growth of quite a remarkable quantity of hair over the pale areas on the scalp as well as of eyebrows and eyelashes. A large number of soft, small, infiltrated, raised patches had, however, appeared over the face, the head, scalp, trunk and limbs, while the lichenification of the skin of the abdomen was rather more marked than before. From September 10th to September 24th there was considerable fever, the temperature attaining nearly 102° F. at night, but it had since sunk to and remained fairly regularly about normal. The enlarged glandular masses in the groins and neck, which had been X-rayed twice, on July 30th and August 17th, had greatly diminished in size.

Careful blood-counts had been made on nine occasions, but no definite conclusions could be drawn from them. The great lymphatic glandular enlargements with an enlarged spleen led to the expectation of the discovery of some leukæmia, but this had never been present. It was perhaps also worthy of note that since August 25th, when arsenical medication was stopped—she was then taking twelve minims of liquor arsenicalis three times a day—the red corpuscles

and leucocytes had slightly diminished in number and the lymphocytes had relatively decreased.

Dr. MacCormac reported on the microscopical appearances of a nodule excised from the arm as follows: "The section was made from a non-ulcerated nodule about the size of a sixpenny-piece. There is well-marked downgrowth of the rete: œdema of this region is distinct in many places, and histological vesicles have been formed here and there, in some of which collections of cells have occurred. There is also distinct parakeratosis. A very definite cellular infiltration occurs in the papillary and sub-papillary layers. These cells are of an indeterminate character, are round, irregular, and oval in type, possibly corresponding to lymphocytes and fibroblasts; a very few, from the extent of their cytoplasm and their nuclear appearances, may possibly be plasmic cells."

Dr. J. H. SEQUEIRA showed a case of *tuberculides*. The patient, a girl, aged 22 years, gave the following history: Seven years ago she had a septic wound of the leg which took three months to heal. A few months later she developed tuberculous glands in the neck, and about the same time a number of red spots appeared on the fingers, forearms, and backs of the ankles and fronts of the legs. The lesion upon the fingers resembled chilblains at first, but later they broke down and discharged for several months. She had never been free from the spots, but during the summer months they had been much fewer and the discharging lesions healed up. She had had a course of tuberculin for three years and a half at a general hospital in London, but there had been no improvement in the condition. The patient has had no other illnesses, and her family history is free from tuberculosis.

The lesions were in all stages, the earliest being an indurated red papule, the size of a small pea, the next stage a purplish hemispherical swelling with a central depression; the third stage was pustulation, which was present in numerous instances. The lesions sometimes aborted before reaching the pustular stage. The final conditions were represented by purplish depressed scars and old white depressed cicatrices. The eruption was scattered over the backs of the fingers, the wrists and the outer surfaces of the forearms, and the legs and buttocks. On the lower extremities there were some larger

lesions, some as large as a sixpenny-piece in diameter, and in appearance and course these resembled Bazin's Erythema induratum. The case having recently come under observation Dr. Sequeira could not report upon the histology or bacteriology. The glands in the neck and left axilla were enlarged.

The PRESIDENT said the case was an extremely typical, although severe, example of the condition. He invited an expression of the experience of others as to the efficacy or otherwise of tuberculin in these cases. His own results with it had been, on the whole, disappointing.

Dr. WHITFIELD said he never gave tuberculin in cases of wide-spread tuberculides; it would be too risky, seeing that such patients were inoculating themselves with tuberculin. But he sometimes gave it very cautiously in Bazin's disease, as it healed up the ulceration.

Dr. MACLEOD thought it would be of special interest if Dr. Sequeira could obtain a biopsy in the case for microscopical examination, and also for inoculation purposes, and report to a subsequent meeting, in view of the fact that several observers had found tubercle bacilli in lesions of this type, and the opinion was gaining ground that they were frankly tuberculous and not toxi-tuberculides in the French sense of the term.

Dr. SEQUEIRA replied that the case was now in hospital, and he would have a biopsy done, and also the inoculation of a guinea-pig.

Dr. J. H. SEQUEIRA also showed a case of *Lichen verrucosus* (?). The patient, who was sent to Dr. Sequeira by Dr. Growse and Dr. Asplen, of Kenilworth, was a farm labourer, aged 43 years. He had had no serious illness, and his family history was unimportant. About five years ago a spot appeared upon the dorsum of the right hand, apparently as the result of an abrasion of the skin. Other spots appeared shortly afterwards, and in each case the patient believed that their appearance was preceded by an abrasion, but it is quite possible that the presence of the lesion may have led to the abrasion. The eruption began with the formation of small warty swellings, which increased in size to form button-like excrescences. The lesions have disappeared completely except for a bluish discoloration on two occasions, viz. three years ago, and also fifteen months ago. This point in the history was verified by Dr. Loxton, of Birmingham, under whose care the patient had also been.

The eruption was of a very unusual character. On the backs of both hands in the region of the metacarpo-phalangeal joints and over the first interphalangeal articulations there were flat, button-like plaques varying in size from a sixpence to a shilling. The surface

was rough and warty, and of a greyish-brown to bluish-brown colour. The lesions were freely movable over the subjacent tissues, and felt hard to the touch. There were similar rather smaller lesions on the elbows. Below the knees the rough, warty surface was absent, the plaques having a purplish colour, suggestive of Lichen planus, the surface being perfectly smooth. There were other plaques on the ankles, over the malleoli and over the tendo Achillis. On the right foot the plaque on the internal malleolus appeared to be in process of involution. At the base of the first metatarsal there was a bluish cicatrix, the site of a previous lesion. There was no evidence of visceral disease and the mucous membrane showed no abnormality.

The case will be further investigated, only a hurried section having been made of one of the nodules removed. This showed a somewhat severe inflammatory process in the dermis with much increase of the corneous layer of the epidermis. Suggesting the name Lichen verrucosus, the exhibitor mentioned that there was a large type of lesion of this variety which many doubted being a true Lichen planus. The appearance of the non-warty plaques on the knees certainly suggested Lichen planus.

The PRESIDENT remarked that had he seen the legs alone he might have shared Dr. Sequeira's opinion as to the diagnosis, but the condition of the hands left him in grave doubt. The history of the case, as observed by some Fellows present, might throw light on the diagnosis. A complete histological examination might also help.

Dr. ADAMSON said that the case was in his opinion one of Erythema multiforme with unusually persistent lesions. The distribution on the backs of the hands and knees was characteristic, so were the recurrent attacks, and the lesions were disc-like with a tendency to ring formation at the margin. The scaling he thought was due to peeling off of the upper layers of the epidermis, in fact a heavy desquamation and not true hyperkeratosis. The case very closely resembled one shown twice by Dr. Graham Little.* Dr. A. M. H. Gray also exhibited a similar case under the title "Persistent Erythematous Eruption."† In the two cases referred to the diagnosis of Erythema multiforme made by the speaker had been agreed to by several members then present.

Dr. HEATH said the case was shown at a medical society in Birmingham two or three years ago, and the lesions then were more erythematous than now. The Sister at the hospital where the patient was said the elevations became much more prominent in the evening and faded during the day. His view then was that they were discoid erythematous lesions on the backs of the hands, and they did not then show the thick horny scales which were now present.

* *Brit. Journ. Derm.*, March, 1912, p. 119, and July, 1912, p. 270.

† *Ibid.*, May, 1913, p. 162.

Dr. GRAY noted that the lesions on the knees disappeared and left distinct atrophy. The case seemed like one shown by him before the Section a few months ago, and at the International Congress. The main difference was that his own case was much more acute; the lesions on the hands had blistered, but there was a similarity with regard to distribution and character. When he brought his own case the lesions had existed nine months. It also reminded him of a case in a child, aged 7 years, with chronic erythematous lesions with marked horny thickening over the knuckles; these were associated with very marked rheumatic nodules about the elbow and on the fingers. Rapid improvement occurred under salicylate of soda internally and the local application of salicylic acid. He had suggested the diagnosis of Erythema elevatum diutinum in both these cases.

Dr. WHITFIELD agreed that the condition on the knees looked like Lichen planus, but on the hand there could be seen an early lesion appearing and this did not look like Lichen planus. Later lesions might be so altered as to look like Lichen hypertrophicus.

Dr. J. H. SEQUEIRA and Dr. PAUL FILDES showed a case of *syphilis* showing *Noguchi's luetin reaction*. The patient was a man, aged 60 years, who had a gummatous ulcer of the palate and leukoplakia of the tongue. The luetin was injected twenty-eight hours before the meeting. The reaction took the form of an inflammatory bright red papule, about $\frac{1}{8}$ in. in diameter, and raised slightly above the surface. There was a small zone of erythema around the lesion. Dr. Sequeira mentioned that about fifty cases had been injected with luetin at the London Hospital. The reaction was found to correspond with the Wassermann reaction except in one instance. In this case there had been a negative Wassermann reaction, while luetin gave a modified response. The suspected lesion had reacted rapidly to antisyphilitic treatment. The reaction of Noguchi, being an anaphylactic phenomenon, was not obtained in cases of florid secondary syphilis.

The PRESIDENT said it had been reported to him by a skilled bacteriologist that the luetin reaction was inconstant and unreliable.

Mr. McDONAGH said he had used luetin in several cases in all stages of syphilis, and found it was not of much use in the primary and secondary stages, though it was good in the tertiary stage. Occasionally a positive reaction had been obtained in patients who had never had syphilis; therefore luetin could not be regarded as having a specific action. Furthermore, positive cuti-reactions in cases of syphilis could be obtained with many other substances. Last of all, a positive reaction did not necessarily mean that the patient had active syphilis, only that he had had syphilis; therefore treatment could not be regulated thereby.

Dr. DAVID WALSH showed a case of *Epidermolysis bullosa congenita*.

This patient is a healthy-looking, well-nourished lad, aged 15 years, who comes from the Foundling Hospital and is shown by the courtesy of Dr. W. J. G. Swift. He presents the usual features of the affection—that is to say, he has been all his life subject to the formation of bullæ following traumatism. These are at times blood-stained. Attempts have been made to obtain cultures from the bullæ with various fluid and solid culture media, but results have been negative. Biopsies have also been made and slides are shown here to-day. The sections necessary for this purpose were carried well into the subcutaneous tissues, but all healed rapidly without complications. The future of this patient is the cause of anxiety to the authorities of the Foundling Hospital. It is their practice to place lads on reaching his age in some occupation at which they can earn their living. In this instance it seemed impossible to find any employment in which he will not be troubled owing to the state of the skin. Any suggestions of members upon this point and also as to treatment will be welcomed by Dr. Swift. X-rays have been recommended, but in view of the exaggerated reaction of the skin to traumatism the use of so potent an agent seems somewhat hazardous, and it is, moreover, not easy to see how any benefit is likely to result.

A further point of some interest is that according to the patient's statement bullæ have ceased to appear in the region of the nose, where they were formerly common.

The heart condition has not been noted by most of the observers who have reported cases of this disease. In a case recorded by Goldscheider it is expressly stated that the patient, a soldier, aged 22 years, had a "sound circulation." In Payne's first case (1882), mentioned by Wallace Beatty,* that of a delicate boy, aged 3½ years, it was stated that "rapidity of healing of the bullæ was an index of the boy's health" (p. 305). In one case reported by Valentin there was dermatographia—a condition which I found associated with valvular disease in one of Norman Meachen's patients.

One point that is specially interesting, from my own point of view, is the state of the circulation. It may be known to some of those present that I have elsewhere ascribed to a defective circulation an important rôle as a predisposing factor in many skin-affections, more especially those of a chronic or recurrent nature. The defect may be

* *Brit. Journ. Derm.*, August, 1897.

central, that is to say, in the valves or myocardium of the heart, or it may be in the arteries, and so on. The skin manifestation under these circumstances I describe as an abnormal reaction to traumatism, due in some way to disturbance of the cutaneous circulatory balance. In the case of Epidermolysis bullosa congenita we find the condition of reaction to traumatism in an exaggerated form. It is accordingly of interest to find that in the patient shown here to-day there is a history of congenital morbus cordis. When first seen, the patient's extremities were purple and congested, and an examination of the heart showed an abnormality of the pulmonary sounds. This observation was confirmed by Dr. Swift, who referred to the early records of the lad and found a note of "blue hands." It would be of interest to note the cardiac condition in other cases of epidermolysis.

Dr. WILFRID FOX said he would be glad to know if any member had seen a case in which the condition was acquired. He once saw a naval officer who apparently acquired the disease in his seventeenth year. It seemed quite clear that he had nothing of the kind as a child.

Dr. MACLEOD remarked, in reply to Dr. Wilfrid Fox, that there were a number of cases on record in which acantholysis, amounting in some cases to Epidermolysis bullosa, had appeared in adult life, but these had developed as a late phase in connection with pemphigus. With regard to the possible relation of morbus cordis and circulatory disturbances to the Epidermolysis bullosa, he considered that their association was absolutely accidental.

Dr. BOLAM said that he had examined the boy's chest in the ante-room, and had not been able to discover any definite heart lesion.

Dr. F. PARKES WEBER said that as far as he could examine the boy, he did not consider that there was the slightest evidence of congenital or acquired valvular disease in the case. Even if a murmur over the pulmonary area could be heard, it was certainly, in itself, no proof of the presence of congenital heart disease. But if there had been congenital heart disease present its association with Epidermolysis bullosa would probably have been a chance one, for in all the numerous published cases of congenital heart disease the presence of Epidermolysis bullosa seemed never to have been noted, and *vice versa* in recorded cases of Epidermolysis bullosa no mention seemed to have been made of the presence of congenital heart disease.

Dr. NIXON said there was a possible connection between the Epidermolysis bullosa and Raynaud's disease—*i. e.* the blue fingers and the vasomotor phenomena.

The PRESIDENT said he believed that low grades of Epidermolysis were quite common. He knew several families in the members of which lesions were produced on the slightest provocation. Such families were in consequence notoriously debarred from playing many games.

Dr. WALSH replied, reminding members that he did not suggest anything but a chance association between the heart condition and the skin-affection; but he

gave reasons for attaching some interest to the heart lesions in this connection. Not only the question of the individual observer came in, but also the question of the stethoscope used. He used a stethoscope, and he would be glad to lend that instrument of precision to those who doubted the existence of an abnormal sound after the boy had been given a little exercise. It was heard near the second left rib cartilage. He would like the matter to be submitted to two or three gentlemen of experience in heart cases.

The PRESIDENT said that in view of the extremely divergent views expressed by the various speakers as to the condition of the patient's heart he moved for the appointment of a small committee for investigation and report upon it. This was unanimously agreed to.

Dr. A. WHITFIELD showed a case of *Xanthoma tuberosum*. The patient was a married woman, aged 53 years. Her statement was that two and a half years ago she began to develop freckles on the forearms. There was a rather large number of not very conspicuous freckles on both forearms, but the patient was quite clear that she did not have them until the time mentioned. Two years ago she noticed the little lumps coming on her elbows, the right elbow being the first to become affected. There was no history of the disease, as far as she knew, in any members of her family, and there was no special history of any ill-health in the patient. The right elbow showed an irregular patch of xanthoma, about $1\frac{1}{4}$ in. long and $\frac{3}{4}$ in. wide, situated over the olecranon process. The patch might be easily seen to be made up of nodules about the size of a hemp-seed, and surrounding this patch was a number of discrete nodules of various size. The left elbow was similarly affected, but to a smaller extent. The nodules were of the usual canary-yellow colour with a faint red areola around them. There was no apparent enlargement of the liver or obvious disease of any organ, but as the patient had been only seen on one occasion a specimen of the urine had not been obtained. Dr. Whitfield did not, however, expect to find any glycosuria, partly because the patient looked and felt so well, and chiefly because of the very slight redness accompanying the yellow nodule formation.

A specimen of the urine was subsequently examined and contained no sugar or albumen.

CURRENT LITERATURE.

ON THE THERAPEUTIC EMPLOYMENT OF THE PATIENT'S OWN SERUM (EIGENSERUMS). B. SPIETHOFF. (*Münch. med. Woch.*, March 11th, 1913, No. 10, p. 521.)

IN 1910 and 1911 Mayer and Linser recorded the cure of some cases of Herpes gestationis and other skin-diseases by injections of human serum. Subsequently Freund had similar results with horse-serum and Hofbauer with pituitary-body extract, and thus demonstrated that the effect of the human serum was not specific, but was shared by other animal substances.

Spiethoff now relates some successful results from injection of the patients' own serum. Blood was drawn from a vein, centrifugalised, and the serum re-introduced by injection. In most cases inactivated serum was used: 10 to 25 c.cm. were injected two to three times weekly, and from two to six injections were given.

The same "reactions" were observed as with "human serum." Usually the best results followed when there was a general and local reaction, and if there was no reaction with "native serum," it might be brought about by changing the serum for "foreign serum" or for mixed native and foreign serum. The diseases treated with good results include prurigo of Hebra, Dermatitis herpetiformis, chronic urticaria, pruritus, psoriasis, eczema, chronic and acute. It might be objected that the mere withdrawal of blood could be responsible for the results, but a series of control cases showed that although some improvement often took place from a small "bleeding," it was not comparable with the excellent results of serum injection. Even Bruch's method of repeated bleedings and subsequent saline injections did not give such good results. It would appear that some substance got from the blood of a patient has a toxic action when again introduced into the blood, but the explanation of the results of this proceeding or, indeed, of serum treatment in general is not yet made clear.

H. G. A.

PEMPHIGUS MALIGNUS CURED BY A SINGLE INTRAVENOUS INJECTION OF BLOOD. G. PRAETORIUS. (*Münch. med. Woch.*, April 22nd, 1913, No. 16, p. 867.)

PRAETORIUS refers to Mayer and Linser's communication on the cure of various skin-affections, especially of severe Herpes gestationis, by injections of normal human serum, and to a case by Heuck of pemphigus much benefited by thirty-four injections of 10 to 30 c.cm. of normal human serum (Heuck, *Münch. med. Woch.*, 1912, Heft 48). He here relates a case of severe pemphigus of eight months' duration lastingly cured by a single intravenous injection of 20 c.cm. of non-defibrinated fresh normal human serum. All other means, including salvarsan injection, had failed. Because the patient refused to go into hospital it was found impracticable to carry out Linser's original method with defibrinated serum, and Praetorius injected 20 c.cm. of untreated blood which had been withdrawn immediately before from the veins of the patient's husband. By the third day the eruption was rapidly disappearing, and in less than a week it had entirely gone. Eight months later there had been no return, and the patient had gained 18 lb. in weight. The author admits that no definite conclusions can be drawn from one case, but hopes for further proof from other sources.

H. G. A.

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